THE

Chicago Medical Journal

AND

EXAMINER.

VOL. XXXIII. — FEBRUARY, 1876. — No. 2.

Original Communications.

ON THE RUPTURE OF THE EYEBALL.

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The force required to destroy with a blunt instrument the continuity of the sclerotic, the firmest and strongest tissue of the eyeball, is so great that usually some or all of the other structures are more or less involved. But for these complications, a rupture of the sclerotic would not be a very serious accident; for it tolerates lesions very well, as we can daily observe in the kind healing of the incisions made intentionally into the sclero-corneal junction for the removal of cataracts, and of wounds inflicted accidentally upon the sclerotic proper. I once saw a young surgeon in an European eye-infirmary, operate for an inveterate convergent strabisumus; and while severing the tendon of the internal rectus, he was unfortunate or unskillful enough to cut into the sclerotic, also wounding the choroid and retina, making a small buttonhole through which the vitreous humor could be seen. The eye was bandaged at once and the patient was kept in bed for a few days, after which time the wound was

healed without any serious damage resulting from the injury. These lesions were incised wounds, it is true; but there are good reasons to suppose a lacerated wound of the sclerotic, unattended by any serious complications, will heal kindly too, although its edges be not quite so smooth. As the rupture occurs always at a place far remote from where the blunt instrument strikes and bruises the eyeball, the borders of the split do not suffer any contusions, and the disturbance of their nutrition is not great enough to prevent a healing by first union if the wound is properly closed.

It makes very little difference whether the conjunctiva over the rupture is torn or not, nor does this give any measure of the degree of the force which caused the accident.

It is not meant that the blow must have been less forcible and injurious to the interior structures of the globe, when the conjunctiva is not torn, than when it is.

I have seen a subconjunctival rupture of a globe whose inner structure was thoroughly mashed. The end of a billiard cue had been thrust in the eye with a terrible result. The sclerotic was burst over the upper half of the eyeball, a profuse bleeding occurred into the eye, forcing out through the wound all the vitreous humor and the greater part of the retina, and crowding the iris and lens to the posterior surface of the cornea. The conjunctiva was not torn, but it was raised from the sclerotic by the accumulation of blood and vitreous humor. The patient did not consent to the extirpation of his demolished eye; and to alleviate his suffering the conjunctiva was cut into and a large quantity of blood evacuated. Here the blow was thoroughly destructive to the eye, and yet the conjunctiva was not involved. And in regard to the healing, the subconjunctival rupture has no advantage over the open wound; nay, I might say, the latter offers a better chance, because it can be cleansed nicely, and closed accurately by a suture. And a good healing depends, in the first place, on a good apposition of the borders of the wound.

The location of the rupture is of some consequence only when it passes through the ciliary ring, because then it is, even without any complications, a very serious lesion on account of the well known dangerous character of inflammation of the ciliary body. But when the rent is in front of, or behind, the ciliary region, the location itself has no decisive weight in determining the question whether the lesion will be fatal to the eye. This depends solely and entirely on the complications usually attending the rupture. And these complications are as different in seriousness as the physiological characters of the various structures composing the contents of the eyeball. We observe an effusion of blood into the anterior chamber, a detachment of the iris from its ciliary border, or a prolapse of the iris; the lens may be dislocated or forced out of the eyeball through the wound, a portion of the vitreous humor may have escaped or blood may fill the whole posterior chamber in place of the vitreous humor; the retina may be detached from the choroid, either in consequence of concussion or by an effusion of blood between the two membranes; and a portion of the choroid and retina may protrude through the rent in the sclerotic. A number of these complications involve the most vital parts of the eye, which then must be regarded as irretrievably lost.

It is unfortunate that these cases constitute the majority, among the lesions in question. No wonder, therefore, if many consider a rupture of the globe as equivalent to the loss of this organ, and believe nothing short of the extirpation of the eye is to be done, although this operation is not always indicated. If we can positively ascertain that the vital parts of the eye have seriously suffered; if we are certain the eye will never be of any good use, but become a source of continual suffering to the patient, we are right in advising its immediate removal. But in many cases we are unable, on the first examination, to estimate the full magnitude of the injury; the globe is burst, and the anterior chamber filled with

blood, so much so that we are utterly ignorant about the condition of the iris, lens and other parts; they may be seriously damaged, or they may possibly have escaped any great injury; we cannot tell. To sacrifice the eye under such conditions I would call a very unjustifiable proceeding, and I mention this because I am well aware of the fact that under just such circumstances the excision of the eye has been advised and performed by ophthalmic surgeons. There is no reason for being in such haste. We can not run any risk by waiting until the obscuration of the anterior chamber is removed, so that we can realize the actual extent of the injury and shape our treatment accordingly, or until such symptoms arise as positively prove the hopeless disorganization of the inner structure of the eye and demand its extirpation. And although many eyes have then to be removed, and one might say the immediate excision would have saved the patient a good deal of pain and time, as it has to be done after all, I would rather bear this blame than to be charged with having sacrificed an eye which might have been saved by a less hasty and more judicious treatment. I like, in doubtful cases, always to give the patient the benefit of the doubt. And how well this expectant treatment is sometimes rewarded, the following cases may illustrate. They have been under my observation long enough to warrant the permanency of the result.

1. *Rupture of the sclerotic; loss of vitreous humor; suture seven days after the accident; recovery.*

On August 11, 1874, A. N., aged thirty years, while hunting, received so heavy a blow on his head by the explosion of his gun, that he was stunned for several minutes. When recovered, he found the right eyelids swollen to such an extent that he could not open the eye. This swelling of the lids subsided under the use of cold water, and on the third day after the accident, he could open his eye again to find that sight though somewhat impaired, was still retained. As the eye continued

to be red and tender, he used, on the advice of a physician, a lotion of acetate of lead.* From this time the inflammation steadily increased in intensity, and the visual power steadily decreased at the same rate.

On August 18, when I examined the eye, it could scarcely distinguish light from darkness. The ocular conjunctiva was intensely reddened, and studded with ecchymoses; over the inner half of the globe it was torn, the rent beginning at six millimetres from the inner margin of the cornea, and extending horizontally backwards for seven millimetres. In the same direction, though less extensively, the sclerotic, choroid and retina were ruptured, and the gaping wound was filled with a gray pluck of protruding vitreous humor. The cornea showed a faint parenchymatous haziness, the aqueous humor was somewhat turbid and colored by effused blood, the pupil of a medium width, immovable and not quite circular, because a small portion of the inner margin was less retracted than the remainder of the iris, and so formed a little tongue protruding into the pupillary space. This irregularity was not caused by posterior synechiæ or irido-dialysis, and it disappeared in a few days. The lens was transparent, but the vitreous humor was densely clouded and did not permit of any illumination of the interior of the eye. The tension of the eyeball was markedly diminished and the upper ciliary region was very sensitive to the touch.

This case resembled, in several points, the two cases of gaping wounds of the sclerotic which George Lawson has recorded in his "Injuries of the Eye, Orbit and Eyelids;" in the one case the wound was closed by a suture on the third day, in the other on the eighth day after the

* It is strange, but nevertheless true, that whenever physicians have to prescribe for "sore eyes," they almost invariably give a lead lotion! If they only could bear in mind that this is, generally speaking, a dangerous eye water and must be used with the greatest precaution! Every text book and every lecturer teaches this, and still they prescribe it with criminal carelessness.

accident, and in both a very gratifying result was obtained. True, Lawson's were *incised* wounds, while ours was a *rupture* of the sclerotic, produced at a somewhat unusual place,* by a sudden, violent blow upon the eye. But as this blunt force struck the eyeball at another point than where its tunics were torn, and as the edges of the wound were not contused but smooth and straight, the chances for its healing when united by a suture, were just as favorable as in the cases quoted above, unless the violent blow had established a deep-seated intra-ocular hæmorrhage, or a detachment of the retina. Such complications, however, could not be thought of, since the patient had affirmed, quite positively, that on the third day after the injury he could still see pretty well. The slight dimness of his sight then was due to the turbidity of the aqueous humor into which a little blood was effused, and the subsequent failure of his vision could well be accounted for by the cloudiness of the vitreous substance which followed the injudicious use of irritating lotions.

The wound was freed from the vitreous protrusion, and its lips were united by a single suture of finest silk. The eye was closed and covered by a moderately firm bandage; the patient was kept in bed in a dark room. On Aug. 21, the suture was removed and the wound remained closed by a fine linear scar; the eye ball appeared fuller, the tenderness of the ciliary region had disappeared entirely, and the patient could already count my fingers at a distance of two feet by candle light. By Aug. 28, the cornea and aqueous humor had become perfectly clear; the pupil, then circular, of normal size, responded readily to the light; the diffuse cloudiness of the vitreous had consolidated itself into a number of dark horizontal streaks; the fundus oculi, though still veiled, could be seen; the tension of the globe was normal, and vision

* "Unusual," because these rents from such a source are known, as a rule, to occur in the anterior part of the sclerotic, and to be near and parallel to the margin of the cornea.

$\frac{30}{200}$. From this time on, I examined the eye repeatedly to confirm a steady decrease of the opacities in the vitreous body; they became fewer in number and shorter, contracting themselves, as it were, toward the place where the sclerotic had been ruptured. On Dec. 30, vision was $\frac{40}{40}$; the exterior of the eye was normal in every respect and so was its interior, excepting a minute conical opacity which marked the seat of the lesion of the ocular tunics. And this improvement was not ephemeral but lasting; at least I found it so about a year ago, when I examined the eye the last time.

2. *Subconjunctival rupture of the sclerotic; prolapse of the iris; recovery.*

On Nov. 7, 1873, J. P. H., 66 years old, presented himself with the following history: Two evenings previously he was in a billiard hall to witness a game, when a billiard ball bounced off the table and struck the old gentleman's left eye. He felt a sharp pain and could see no more with that eye. On the day of his first visit, the pain was very moderate; the upper ciliary region, however, was very sensitive to the touch. There was some tumefaction of the lids and considerable redness and swelling of the conjunctiva; the cornea transparent, but the anterior chamber filled with blood, so much so, that nothing could be ascertained in regard to the pupil and iris. About two millimetres from the upper margin of the transparent cornea, and parallel with it, the conjunctiva was raised up by a dark bluish substance 10 millimetres in length and $1\frac{1}{2}$ millimetres in width. By November 11, the blood effused into the anterior chamber was re-absorbed, and the full extent of the lesion could be realized. The iris exhibited a large defect in its upper half, as if a broad iridectomy had been performed. The dark blue mass lying under the conjunctiva, was the upper portion of the iris protruding through a long subconjunctival rupture of the sclero-corneal border. The refractive media were trans-

parent, and the fundus oculi did not show any anomaly. During strict functional rest, enforced by the use of atropia and a bandage, the eye quickly recovered of the traumatic inflammation. All signs thereof had faded away by Dec. 4, when the sight was $\frac{20}{20}$ (vision of the right eye being $\frac{20}{40}$). The hernia of the iris having shriveled down to a thin atrophic tissue and the scar in the sclero-corneal junction being well consolidated, the above described abnormal elevation of the ocular conjunctiva had made room again for the natural smoothness and normal curvature of the tunics. Only at the inner angle of the wound the scar showed a slight distension and attenuation of the tissue, and fearing that this might lead to a staphylomatous or "cystoid" expansion, I punctured it (December 16) with a broad needle, and excised the little thin flaps. The aqueous humor, of course, was all drawn off; but after a few days the anterior chamber was restored. No further bulging of the cicatrix took place; and up to the present writing, the patient has been using the restored eye with comfort.

SOME REMARKS ON INTRA-UTERINE POLYPI, WITH SPECIAL REFERENCE TO THEIR DIAGNOSIS AND SURGICAL TREATMENT; WITH THREE CASES.

BEING THE REPORT OF THE GYNECOLOGICAL SUB-SECTION OF THE SECTION ON OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

(Read before the Chicago Society of Physicians and Surgeons, Nov. 22, 1875.)

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MR. PRESIDENT AND GENTLEMEN:

It would be impossible, without taxing your time and patience to an unwarrantable degree, to make a report which would adequately cover the ground now occupied by Gynecology, a department which has attained a position scarcely second in extent and importance to the other

great practical branches of medicine. I have therefore selected from this wide domain a single subject, which, while free of intrinsic interest, will serve to exemplify some of the advances which have been made in recent years in this field of surgery.

A polypus of the womb is an outgrowth of some portion of the uterine tissue, which remains attached to the wall of the organ either by a broad base or a defined peduncle. It is therefore a local hypertrophy of some of the normal structures composing the organ. These growths vary greatly in size, being sometimes not larger than a grape seed, and at others larger than a cocoa-nut. They grow from any portion of the uterus; from its external surface or from its interior. In the remarks which follow, I will confine myself to the latter class, namely, those which have their origin in some portion of the cavity of the organ, or project into it, and which are still retained within its limits. This will exclude from our consideration not only other morbid growths to which the term polypus is sometimes applied, such as retained portions of placenta or of fœtal remains, fibrinous polypi or blood-clot, cauliflower excrescence and carcinomatous growths, although these may and frequently do assume the polypoid form and give rise to symptoms identical with those of true polypus, but also true polypi which project from the peritoneal surface of the womb and which arise from the external os and cervical portion.

Intra-uterine polypi may take their origin from any part of the interior of the organ—the fundus, the body, or the cervix. As they increase in size they usually pass downwards through the os uteri into the vagina, and they may even protrude beyond the vulva. When they have emerged from the os uteri and are discoverable in the vagina, their diagnosis and treatment become comparatively easy and simple.

Varieties.—Uterine polypi are of three kinds—the mucous, the cystic, and the fibrous.

The mucous polypi consist of the cellular or connective

tissue of the mucous membrane. They are commonly pedunculated, the peduncle being formed by an elongation of the membranous tissue drawn downward by the growing polypus. They are usually of small size, being rarely larger than a pea, although I have seen one as large as an English walnut, and Dr. Atthill gives an account of one which he saw in a patient twenty-four hours after delivery, which had attained the size of an orange. It was attached by a long slender pedicle just inside the os uteri and hung partially outside the vagina. These polypi are highly vascular, of a bright pink, or pinkish gray color, and commonly of a soft gelatinous consistence. They may grow from any part of the cavity of the womb, but are most frequently found attached to the cervix.

The cystic or glandular polypi also have their origin in the mucous membrane, or rather in the glandulur structures imbedded in it. Their attachment is always sessile, and they rarely exceed a filbert in size. Generally they are much smaller, and when they exist in great numbers, as they sometimes do, the aggregation resemble a vegetating mass surrounding the os uteri like a fringe. They are formed from the enlarged utricular or Nabothian glands, although they are thought to be sometimes new formations. They are whitish or pearl-colored, and consist of clear, tenacious mucus resembling the white of an uncooked egg, enclosed in these delicate walls which are easily ruptured. Their usual place of origin is the cervical canal.

The fibrous polypi grow from the muscular or submucous tissue of the uterus. They consist of the same anatomical elements, in varying proportions, as compose the parenchyma of the womb, and sometimes attain a very large size. A fibrous polypus may be regarded as simply a fibrous tumor in an advanced stage of development. The two are identical in structure; either may be surrounded by a capsule of condensed cellular tissue, and the symptoms produced by them are the same. A

fibroid tumor of the sub-mucous variety, partly by increasing in size more than the parts around it, and partly, also, by the contraction of the surrounding muscular fibres, projects in the direction of the least resistance—that is, into the uterine cavity. These forces continuing to act, the tumor finally becomes pyriform and pedunculated from its own weight, and its largest portion hangs in the distended cavity of the uterus. In other cases its attachment remains sessile. In either case it soon occludes the canal to some extent, either at the internal os or at some part of the cervical canal, and, operating in the manner of a ball-valve, prevents the free exit of any fluid that may be poured into the cavity above it. The consequent distension of the uterine walls causes contractions, sometimes of a very powerful character, and the polypus, when pedunculated, is forced downwards and may eventually pass into the vagina. This process of distension is from the first facilitated by the loose nature of the attachment of these muscular tumors to the surrounding uterine tissue.

Fibrous polypi generally arise from the fundus or body of the uterus, although they are sometimes attached to the cervix. In the majority of cases they are solitary, but Klob states that two are sometimes found together, their sides being flattened by contact with each other; and Dr. George H. Kidd* has given the details of a very remarkable case, in which he removed twenty-nine fibrous polypi from the interior of the cavity of the body of the uterus of an unmarried woman, aged fifty-six years, at four operations—all within a period of ten months. This case is certainly quite unique.

The pressure of a fibrous polypus in the cavity of the womb stimulates the organ to increased growth, and its walls become thickened and elongated, so that the fundus may frequently be felt above the pubes, and even as high as the umbilicus. It may incline to either side, and may

* *Dublin Quarterly Journal of Medical Science*, Feb., 1869.

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be regular or irregular in outline, according to the shape of the growth within.

Symptoms.—The symptoms which denote the pressure of polypus are chiefly three—hæmorrhage, leucorrhœa, and pain. Usually the first symptom which attracts the notice of the patient is a profuseness of discharge at the catamenial periods. At first she may scarcely observe the change, but after a time the periods increase in length and the intermenstrual times become shortened; and, by and by, she has a sanguineous discharge on making any extra exertion, so that in some instances there is an almost constant hæmorrhagic flow.

Alternating with this discharge is the next most common symptom, leucorrhœa. This is generally abundant, and frequently offensive. Sometimes it is clear, transparent, ropy and tenacious, and may be seen hanging from the os uteri like a mass of jelly; at others, it is yellowish, brownish or greenish, and occasionally streaked with blood. Sometimes the discharge is of a thin, watery character, tinged with blood. This is especially likely to accompany the pressure of the small cystic polypi that grow in the canal of the cervix, and produce a patulous condition of the os.

Under such a continual drain, the health of the patient soon fails; she becomes feeble, pale and cachectic; digestion is deranged; she has pains in the back, and a sense of weight and dragging in the pelvis.

Pain, although a frequent accompaniment of polypus, is not so generally present as the symptoms already mentioned. When the polypus is so situated as to obstruct the exit of fluid from the cavity of the uterus, very severe pain of an expulsive character is experienced during the menstrual flow; and similar pains may occur at other times from the retention of mucous and serous fluids. Pain is also felt in many cases behind the pubis, and in the neighborhood of one or other ovary—never, in my experience, in *both*. The pain varies in degree from the slightest soreness to the most severe uterine colic.

The gravity of the symptoms produced by uterine polypi is by no means proportionate to the size of the growth; for, while in some cases of very large polypi the hæmorrhage, leucorrhœa and pain may all be slight, in others, a polypus no larger than a currant may cause the most exhausting leucorrhœa or even fatal hæmorrhage.

When, in connection with spasmodic or intermittent pains resembling those attendant upon labor or abortion (these conditions being excluded), there are frequent or copious hæmorrhages and leucorrhœa, with or without enlargement of the womb, we may suspect the presence of polypus, but with these rational symptoms only we can do no more than suspect it. Nothing but a physical exploration can enable us to decide the point definitely; and when the symptoms enumerated can not be otherwise accounted for, and are not controllable by the use of ordinary means, an examination of the pelvic organs should be promptly made.

Diagnosis.—As already stated, uterine polypi, when they have descended beyond the os uteri, are easily discovered both by touch and sight, and they are as easily treated; but it is a very different matter when they are still within the uterine cavity. Occasionally, under favorable circumstances—for example, during an attack of bleeding when the cervix is greatly relaxed—the polypus may descend so low as to be on the point of emerging from the os uteri, and may then be perceived by the finger, or even by the use of the bivalve speculum, which expands the os when its blades are separated. But in most cases the diagnosis can only be made with certainty by artificially dilating the cervical canal sufficiently to permit the introduction of the finger.

The means now generally used for dilating the cervix are expansible tents made of prepared sponge, or of the laminaria digitata, or sea tangle. In this country the sponge is most commonly used, while in Europe preference appears to be given to the laminaria. For myself

if restricted to the use of one only of these agents, I would prefer the sponge tent, because of its superior dilating power when well made; but in most cases I employ both.

It has been urged, as the chief objection to the use of the sponge tent, that it becomes horribly offensive after lying in the genital tract a few hours; but, inasmuch as this unpleasant odor can be prevented in great degree, by incorporating with the tent either permanganate of potash or a solution of carbolic acid, this drawback should not stand in the way of its employment. My objection to the sponge tent is, I think, a much more serious one; its use almost invariably results in the removal of the epithelium from the mucous membrane, leaving a large denuded surface, which may become an avenue for the admission of septic material into the system.

In order to avoid this, I adopt the following plan: instead of introducing as large a sponge tent as the cervical cavity will admit, as is the common custom, I prefer to use a smaller one, and then insert by its side, one after another, small slips of sea-tangle, sufficient in number to surround, if possible, the sponge. In this manner a much larger quantity of dilating material can be used than is possible with a single sponge tent, or with a number of laminaria tents used without the sponge, and, at the same time, the mucous membrane is protected from the injurious contact of the sponge. To accomplish this proceeding properly, the sponge tent should be slightly coated with a mixture of melted wax and lard—one part to three—in order that it may not absorb moisture and commence to expand too quickly.

It is quite important that sponge tents should be well made, and of properly selected material. Many of those in the market, although very elegant in appearance, are almost worthless as dilating agents, and I have sometimes been greatly disappointed at finding them, twenty-four hours after their introduction, scarcely larger than when first inserted. In order to be efficient they should not be

made of the finest and closest sponge, nor, on the other hand, of the very coarse or honeycomb variety; the first lacks resiliency, and the other lacks power. Good, sound, unbleached sponge, of medium texture, is the best for the purpose. Sponge tents should not be saturated with mucilage of gum Arabic, as is still directed by some authorities; but, instead of this, they should, before being compressed, be soaked in a weak solution of carbolic acid.

When the first attempt fails, as it sometimes does, to effect a sufficient degree of dilatation, rather than repeat the introduction of the tents, I prefer to use the rubber dilator of Molesworth. From frequent use of this instrument, I can bear witness to its safety and efficiency. By its aid, after the cervix has been softened and relaxed by the tents, we can usually, in a few minutes, produce all the additional dilatation necessary.

The cervix having been sufficiently opened, the index finger may be passed into it, and if firm downward pressure be made at the same time upon the fundus through the hypogastrium, we can, in many cases, explore the uterine cavity beyond the os internum, and be enabled to detect the presence of an existing polypus, even of the smallest size.

If the polypus be of the larger kind, the finger will probably pass around it, between it and the cervix, on every side, showing that its attachment is higher up, the distance being determinable in some measure by the degree of mobility of the growth.

In the case of very obese patients, or where, from any other cause, the finger cannot be made to penetrate sufficiently far, we may usually succeed by inducing anæsthesia, and introducing the hand into the vagina.

In examining for polypi, it is well to bear in mind that they are sometimes intermittent in their appearance. A case came under my observation, several years ago, in which a mucous polypus, about the size of a cherry, could only be seen during the menstrual periods. At

those times it protruded slightly beyond the os uteri, but at other times it receded within the cervical canal, and could neither be seen nor felt. Several writers have reported similar instances. Hence, it is better, in a suspected case, to make the examination during the menstrual flow, or an attack of metrorrhagia. The polypus is not only more likely to descend lower at such times, but the relaxation of the os and cervix are also much greater, and are more likely to admit the tip of the finger.

The uterine sound is commonly not of much use in enabling us to differentiate a polypus from other growths or conditions. It may teach us definitely that the cavity of the uterus is lengthened, and inform us as to its direction, but it is only the fibrous polypus that causes notable enlargement of the womb, and the same result is produced by an imbedded fibrous tumor.

A few years ago, Dr. Kidd called attention to the fact, that in several cases observed by him, the polypus caused a bulging of the uterine wall opposite the point of attachment; and he maintained that if it should be found, after more extended observation, to be a law, that an intra-uterine pedunculated polypus in its development produced a bulging of the opposite side, while an interstitial or submucous fibrous tumor caused, as is well known, a bulging of the wall in which it is developed, the fact would be of great practical importance. For a knowledge of it would enable us, by the use of the sound alone in many cases, to diagnosticate between these two forms of neoplasm—that is to say, where the sound passed on the side of the bulging, it would show that the growth was a polypus, and where it passed on the other side, it would indicate the presence of a non-pedunculated growth. But such is not the law; or, if it be, there are so many exceptions to it as to make it valueless for the purpose indicated. I have myself seen two cases of polypus in which the bulging corresponded with the point of attachment.

There is occasionally great difficulty in introducing

the sound, and sometimes this cannot be done at all. This happens when the polypus drags the fundus very strongly forward or backward, in one case throwing the os uteri upward into the hollow of the sacrum, and in the other behind the symphisis pubis.

I have never been able to verify the claim made by some gynecologists, that by the use of the sound we can ascertain the fact of mobility of an intra-uterine polypus; and I have the belief that such a notion has arisen from an erroneous sense of touch. When a polypus is sufficiently large to be perceived at all by an insensitive metallic instrument, it is in such close contact with the walls of the womb as not to be readily moved about; and, notwithstanding the fact that they are frequently so represented in the books, uterine polypi do not hang in the cavity of the womb, as does the clapper in a bell, capable of dangling from one side to the other.

Treatment.—Uterine polypi sometimes disappear spontaneously. This may occur in two ways. First, the weight of the polypus by its traction upon the pedicle may cause the latter to become thinner and thinner until the growth drops off; secondly, ulceration of a destructive character commences in that portion of the mucous membrane covering the pedicle, and the latter becomes softened and gangrenous. When this latter result happens, the symptoms strongly resemble those of cancer.

But it is not our duty to wait for any such spontaneous cure, which very rarely, and usually never occurs. When we have ascertained the presence of a polypus it is our duty to remove it, if removal be practicable. The operation may be a very simple affair, or it may be one of the most difficult in surgery. If the growth be small and low down in the cervix, or, if the pedicle be attenuated and readily reached, it will be sufficient to seize it with a pair of suitable forceps and twist it round and round until it drops off; or, in such cases, the pedicle may be snipped with scissors. When forceps are used, they should be strong both in blade and joint.

But these modes of procedure only succeed when the pedicle is small. When it is large and thick, other means must be used. Of these, the best and the one most usually available is the écraseur, armed with a single soft iron wire. Dr. Kidd and Dr. Atthill prefer a steel wire—a piece of piano-forte string. They consider the steel quite as manageable as the iron after its introduction to the uterine cavity, and it is certainly much stronger. In a single case in which I tried it, I did not find it so convenient as the soft wire, and, indeed, was obliged to change it for the latter. The wire should be carefully selected, and should be free from rust-spots and any other defect. It should be adequate in size and strength for the work it has to do. It is not only exceedingly annoying to have a wire break inside the uterine cavity, after it has been placed about the peduncle of a polypus with, perhaps, great difficulty, but such a mishap is also dangerous, for it is almost impossible to withdraw it without seriously wounding the interior of the womb. Likewise, the instrument should be strong, and the screw furnished with sufficient leverage to tighten the wire easily. The more power we have at command, the more gently and steadily it can be employed.

The operation for removal of large polypi should always be done under anæsthesia. The fatal result in one of the cases I will relate further on, occurred, I believe, indirectly from neglect of this condition. The pain and tension upon the nervous system proved too great for the patient's power of endurance, and prevented the proper completion of the operation.

The patient, then, having been brought fully under the effect of ether or chloroform, the operator should seize the anterior lip of the uterus firmly, with a strong vulsellum, and by steady traction aided by supra-pubic pressure, the cervix should be brought down to the vulva. Then, giving the vulsellum in charge of an assistant he (the operator) should pass the index finger into the cervix and ascertain, accurately, the size and place of attachment

of the peduncle. A second strong vulsellum is next to be passed into the cervical canal and affixed as high as possible on the polypus. This being done, the wire loop of the écraseur, passing over the handle of the instrument and guided by the finger, is placed around the peduncle at the proper point and slowly tightened by turning the screw. This process should be continued, steadily and gradually, until the peduncle is cut through, when the écraseur, vulsellum and polypus may be brought away together.

Before releasing the hold of the vulsellum upon the cervix, the finger should again be passed in and the uterine cavity thoroughly explored, to ascertain whether more polypi be present. If so, they should be at once removed; if not, the whole interior of the womb should be brushed over with a solution of perchloride of iron in glycerine, and the patient placed in bed.

In applying the loop of wire around the pedicle it is neither necessary nor desirable that it should enclose the latter very near its attachment to the uterine wall—not nearer than a half inch or an inch. It is undesirable because the proceeding is then more likely to be followed by pain and inflammation; and it is unnecessary because it has been repeatedly demonstrated that the removal of any considerable portion of a polypus is as surely curative as though the whole be taken away.

Occasionally much difficulty is experienced in extracting a polypus from the uterine cavity after it has been detached. Prof. Simpson mentions one case in which the os uteri was divided to allow the possibility of extracting a polypus of the size of a filbert. Vulselli with short teeth do not always hold, and those with long teeth are difficult to open in the narrow uterine cavity; besides, there is danger that these latter may catch in the uterine walls.

(TO BE CONCLUDED.)

THE MICROSCOPE IN DAILY PRACTICE.

(FOURTH PAPER.)

By I. N. DANFORTH, M.D.,

Lecturer on Pathology in Rush Medical College, Chicago.

The solid and semi-solid structures, both healthy and morbid, which require microscopic examination, should be specially prepared for this purpose. Indeed, such preparation is absolutely necessary, if a successful or reliable examination is to be made, or if the operator desires to preserve his specimens permanently. And this leads me to say, that it is entirely within the power of any physician, however busily he may be engaged in practice, to prepare and permanently preserve microscopic specimens of the various tissues, healthy and morbid, until he shall possess a museum of his own, sufficiently extensive for all ordinary purposes of study and comparison. And such specimens are particularly valuable, because the gross appearances of each specimen can be studied, and also because the history, and frequently the ultimate result of each case, can be accurately ascertained, by the possessor of the microscopic sections.

It is vastly important that our younger practitioners be led to understand how much they can do towards building up the science of pathology by carefully and systematically utilizing the material which comes within their reach. One single case, carefully studied and accurately and *conscientiously* reported—especially if death occurs and a post-mortem is obtained—possesses an imperishable value to medical science; and it may be that this single case presents some new feature hitherto unnoticed, which is of vast importance in elucidating some dark point in pathology.

It is really a simple matter to prepare sections of the tissues for microscopic examination, and to preserve them in an unalterable form. But when the process is described on paper, it seems quite complicated. It

requires few materials, very little outlay of money, but considerable tact and practice, and inexhaustible patience and industry. It is necessary, also, to do things of this sort in a systematic and workmanlike manner. A careless, unsystematic and slovenly microscopist, is all but —and I think quite—an impossibility. In fact, one of the collateral benefits that any young physician gets out of his microscope, is that through its use he acquires habits of neatness, promptitude and method.

In the present paper I purpose indicating the means necessary for investigating and preserving the histological structures, leaving the methods of their employment for a future paper.

First. For the preservation of large specimens, as tumors, or portions of organs which it is desired to keep temporarily or permanently, common commercial alcohol answers every purpose, and is, upon the whole, best of anything. A very valuable preservative fluid, which I have employed for several years, is the following: ℞ Alcohol, Water, *aa* f ʒ x ; Glycerine, f ʒ iv ; Carbolic Acid, ʒ ij. Mix.

For small specimens, like portions of morbid growths of diseased organs, which are intended for future microscopic study, this fluid is very useful, as it causes much less shrinking and distortion than alcohol. Dr. Keen, of Philadelphia, speaks very highly of solutions of hydrate of chloral, (10 to 20 grains to the fluid ounce of water), as preserving fluids for soft tissues. I have several specimens in chloral solutions, (20 grains to the fluid ounce), and they are keeping very nicely.

It is not necessary to multiply words concerning preserving fluids ; every one can modify them to suit himself and his specimens after a little experience, and perhaps a few failures. I repeat, however, that the formula given above (for alcohol, glycerine, etc.) will be found very useful for specimens which it is important should be kept with as little change as possible.

Second. Many tissues—for example, the brain and

spinal cord, and medullary cancer—must be hardened before microscopic sections can be made. For many specimens, the strongest commercial alcohol answers every purpose; indeed, I rarely find it necessary to employ any other hardening agent. A solution of chromic acid has been much employed, especially by Mr. Lockhart Clarke, for hardening nervous structures. One part of chromic acid is dissolved in 200 parts of water. For hardening portions of brain substance proper, however, the solution must be weaker: say, one part of acid to 300 of water. I have employed this agent considerably, but I think strong alcohol does equally well, and chromic acid is not always at hand, at least in the smaller towns. Other formulæ, for hardening solutions, are given in the text books and journals, but they possess no advantages over those mentioned above, and therefore need not be alluded to.

Third. For the satisfactory and profitable examination of the various tissues—both normal and abnormal—very thin slices or sections are requisite, and a variety of instruments have been invented for the purpose of making these sections: such as Valentin's knife, various forms of razors, etc.

Valentin's knife is both complicated and costly, although it is very efficient in skillful hands. An old razor does very well, but is rather too heavy and clumsy for ordinary use. Razor blades, "beveled" upon one side only, are kept by the dealers in microscopists' wares, and are much employed as section knives.

A few years ago, I commenced using the instrument of which the accompanying figure is a fair illustration:

It "consists of a single blade, two and one-half inches long, from heel to point, by three-eighths of an inch in width. It is exceedingly thin, and is, of course, made of

the finest steel. It is mounted in a shell handle, is made to close up like an ordinary pocket knife, and is supplied with a pivot, which slides into a slot in the blade to hold it in position, like those usually found in surgical pocket cases. * * * With this simple instrument, I am able to make sections in all respects equal to those I formerly made with Valentin's knife, and with far less trouble." (The "Lens," vol. I, p. 28.) After a larger experience I am prepared to reiterate the opinion I published in January, 1872, concerning the value of this simple and inexpensive instrument for the purpose of making microscopic sections of *all* varieties of soft tissues. Within the past two years, I have procured an improved Valentin's knife, and have also tried my hand at inventing an "improved" razor-shaped knife; but, after a brief experience, I gladly abandoned them both, and returned to the thin-bladed knife just described. And I now recommend it, unhesitatingly, as the best section-instrument with which I am acquainted, because it is inexpensive; because with it any one can quickly learn to make handsome sections, and because they can be made rapidly; because it is easily sharpened, and that without any special dexterity; because it is always ready for use, without any troublesome and delicate adjustment of parts; and, lastly, because it is easily cleaned, and, therefore, easily kept from rusting.

I have dwelt at considerable length upon this matter, in view of the fact—which my own experience has taught me—that an efficient and simple section-knife is a sort of standing temptation to make sections; whereas, a complicated affair has exactly the contrary effect. The knife I recommend is so easy to manage, in all regards, that a man must be the very perfection of clumsiness who can not cut delicate sections after a little experience in its use.

Fourth. A few simple implements, involving hardly any cost, like the following, should be provided: A pair of rather coarse, common sewing needles, mounted in

wood handles, like the wooden rods employed in making pen-holders; three or four small glass rods, each drawn to a fine point by heating in a spirit lamp: a large-sized, and a few small-sized camel's hair pencils; a dozen of two drachm or half drachm phials fitted with corks; and, of course, a few glass slides and their covers of glass or mica, such as I described in the paper published in the JOURNAL AND EXAMINER for October.

It will be a saving of time and trouble if the above list of articles be provided, before attempting any real work with the microscope. A few reagents will also be necessary. The following are those which are really essential for the physician's ordinary purposes: Alcohol, pure and diluted; sulphuric ether; solution of acetic acid, containing about twenty per cent. of acid; aqueous solution of iodine, made by adding ten or fifteen drops of the "Liquor Iodinii Comp." U. S. P., to an ounce of distilled water; and little slips of both red and blue litmus paper. These reagents should be kept in ounce bottles, with the stoppers so arranged as to allow of the application of a single drop of any one of them to a glass slide. This may easily be done by passing a small glass rod through the cork, and allowing it to project to the bottom of the bottle; a drop or two will always adhere to the rod when it is withdrawn. A very convenient test bottle may be made by passing one of the little instruments called a "medicine dropper," through a cork, in place of the glass rod. The medicine dropper consists of a small rubber bulb, into which is inserted a short pipette; the bulb is allowed to project *above* the cork, while the pipette passes *through* it, and reaches to the bottom of the bottle. If the rubber bulb be compressed, the air is, of course, expelled, and the liquid in the bottle rushes in as soon as the pressure on the bulb is removed; the convenience of this arrangement will suggest itself at once. Glass-stoppered bottles, with the stoppers drawn out into delicate glass rods, reaching nearly to the bottom of the bottle, may be obtained of the dealers in chemical wares,

but they are no better than the "home-made" contrivances already described. Dealers in dentists' supplies also keep bottles in which the upper portion (the "handle") of the glass stopper is a hollow bulb, while the lower portion is a small glass rod reaching almost to the bottom of the bottle. If the bulb be gently heated in the flame of a spirit lamp, or in hot water, the air is mostly expelled; if, now, the open extremity of the rod be plunged beneath a liquid, the latter will mount in the glass tube and fill the bulb more or less completely; if the bulb be held between the fingers, it will always be sufficient to expel a drop or two of the reagent. These bottles cost twenty-five cents each, and they are the most convenient of any yet devised.

The length to which this paper has already reached, admonishes me that I shall be compelled to defer what I have to say upon staining fluids, preservative media, etc., until a future time.

74 South Morgan Street.

PERFORATION OF THE APPENDIX VERMAFORMIS; DEATH IN THIRTY-SEVEN HOURS.

By CHAS. WARRINGTON EARLE, M.D., Chicago.

Thomas Harbridge was a healthy, robust, and temperate man; of English origin; aged 29; a contractor by occupation. His health up to the time I was called, had been such that he had not required the services of a physician for fifteen years.

I was called to see this gentleman, March 9th, 1873, and found that the day previous he had eaten very heartily of veal, indeed had made his dinner meal almost entirely of it.

He felt very uncomfortable for three or four hours, and finally was seized with severe pain in the region of the umbilicus. He was habitually constipated and the evening before, as was quite usual for him, had taken a dose

of some kind of cathartic pills, which had, as yet, caused no evacuation of the bowels.

I ordered a laxative sufficient to move his bowels; hot fomentations to the abdomen, and anodynes, after the action of the cathartic, in such quantity as would give him ease.

I diagnosticated the case as indigestive colic, and expressed my belief to my patient that his sickness would be of short duration—that after a complete evacuation of the bowels he would be comparatively free from pain. Upon taking my departure I requested to be notified if he was not better the following day.

I was recalled March 12th, and informed that after the action of the medicine which had been ordered three days before, the patient had been greatly relieved, but at present he was suffering with a diarrhœa and a slight diffused soreness in the abdomen. A more careful examination showed a tongue covered with a whitish fur, red at the end, and dry; a pulse at 120; temperature in the axillæ, $101\frac{1}{5}$; slight tenderness in the right iliac fossa. He was ordered the turpentine emulsion, and an easily digested diet. In the evening his pulse was 120; temperature, 102.

March 13. Patient better in every respect. His fever had subsided; the diarrhœa had ceased; the appearance of the tongue is improved. He was given an acid tonic (the acid arom. sulph., with some carminative), with instruction to resume the emulsion if his diarrhœa returned.

March 14. Visited Mr. H. at 9.30 A. M., and found him sitting in a chair and feeling very comfortable. He had eaten a fair breakfast and expressed himself as "all right, only a little sore from the pain, and weak." His pulse was at 90; I counted it at least twice. He complained of *no local pain whatever*. There was at this time no particular soreness even in the right iliac fossa, indeed, the slight pain that he experienced, was more like a diffused lameness, from the severe spasmodic

pains of the preceding days. He was to continue the tonic; the light and easily digested diet; and was cautioned to keep quiet.

One hour and a half later I received an urgent call to revisit Mr. H. I obeyed the summons as speedily as possible and found my patient in collapse—covered with a cold, clammy perspiration—pale and nearly pulseless. I learned that a short time after my morning visit, he felt well enough to walk down stairs, and while standing conversing with one of his workmen was suddenly seized with a most violent pain in the abdomen, and was in a few minutes in collapse.

I administered diffusible stimulants with anodynes; applied heat to the extremities, and fomentation to the abdomen, and by one o'clock P. M. his pulse was somewhat better, yet the pain was severe. At three o'clock P. M. his pulse was not as good; his face was congested; extremities still cold; countenance hypocratic; indeed he was still in collapse, and nothing that I could do was rallying him.

There was no doubt in my mind, at this time, as to the nature of the difficulty we had to combat. It was evident that some foreign substance had been emptied into the peritoneal cavity. What it was I could not tell. The previous history of the case would hardly justify any definite opinion. I immediately asked for, and it was decided to have, a general consultation.

That evening Drs. W. G. Dyas, T. D. Fitch and A. H. Foster visited the patient with me. After a careful consideration of all the symptoms present in the case, it was decided that the collapse from which our patient was suffering, and which already foreshadowed a most serious result, was peritonitis, caused by one of three things, to wit: perforation of the bowel from some ulcerative process—rupture of a blood vessel—or extravasated blood from minute openings.*

* Broussais and some other authorities speak of the induction of peritonitis by the exudation of blood into the abdominal cavity, without solution of continuity in any of the blood vessels. * * * * *

It was also agreed that opiates and stimulants by mouth, and fluid nutriment by rectum, would give us the only hope of successfully combating the difficulty, and restoring our patient to his anxious friends.

The morning of the 15th, Dr. Fitch saw the case with me. There was certainly no change for the better. His pulse, if any difference could be detected, indicated a more serious condition. There was tympanitis over a large part of the abdomen, and dullness in the *left iliac fossa.* No symptoms of general effusion were present. Early in the day the patient was seen by Dr. Tree, a gentleman of more than forty years practice, the family physician to the parents of Mr. Harbridge. As far as I have learned, he coincided with the opinions advanced by the medical gentlemen in attendance, in both diagnosis and treatment, and, at his suggestion, the ung. hydrargyri was thoroughly applied to the abdomen. All our efforts were in vain, however, and death took place thirty-seven hours after his sudden attack.

A post mortem examination was made about twelve hours after death, at which were present several physicians and a number of relatives and friends of the deceased.

The cadaveric rigidity was not well marked, indeed we would not expect it; for in the case of persons killed suddenly in full health, or dying after a very brief sickness, the rigidity of the muscles may not take place for thirty hours. The body was well nourished, there being from one to two inches of adipose tissue between the integument and abdominal muscles. Both the peritoneum and intestines showed the effect of general inflammation. In the abdominal cavity was found a large

According to Broussais, the pulse is at first full, soon becoming soft and compressible, the pain very acute, often intermittent, the extremities are cold and convulsions quickly close the scene. Laennec also spoke of hæmorrhagic exudations from serous membranes, and Rokitansky attributes such tendency to certain blood changes, such as the tubercular and alcoholic cachexiæ, the scorbutic constitution, etc., etc.—*Reynolds' System of Medicine, Vol. III.*

amount of albuminous exudation and a small amount of serum.

As the intestines were partially removed from their place, we found, in about the central part of the abdominal cavity (a little to the right) an oval, bean-shaped substance, resembling very closely a peanut, indeed several gentlemen remarked at once the resemblance I have named.* As we proceeded to examine the right iliac fossa, evidence of pus was found, and when the cæcum was withdrawn, the secret of the trouble was plainly manifest. The appendix was inflamed throughout its entire length, and perforation had taken place at three points. The largest opening, and the one from which the concretion mentioned above probably escaped, was about one-half inch from the bowel, the two other openings were near the pointed extremity. Within the tube, and between the openings mentioned, were found four other concretions, similar to the one which had escaped into the peritoneal cavity.

There was a large amount of pus in and around the appendix, and the evidences of a severe and destructive inflammation were very marked.

* My patient had been a great lover of peanuts, and generally had a supply with him, eating them while at his work.

Editorial.

OUR LIBRARY.—In this number of the JOURNAL AND EXAMINER we give a partly full account of the opening of the Library of the Medical Press Association, an event which must interest the whole profession of the Northwest.

The Medical Libraries of Chicago have never been extensive, and in the great fire of 1871, a number of good private collections of books were lost, and since then have not been fully replaced.

Prior to 1871, Cook County Medical Society had collected a small library, amounting, we believe, to about two hundred volumes. This was probably the first attempt made in Chicago to form a public Medical Library, and almost as soon as begun the collection was burned up. The officers of the Academy of Science have generously given the Medical Press Association, room for their Library in their fire-proof building, at 263 Wabash Avenue.

It is hardly necessary to urge the need of a public Medical Library. Without it, extensive research is impossible, and progress in the science of medicine, if not entirely prevented, is certainly very much retarded.

The extensive range of books required for thorough research, is very seldom afforded by private libraries. We know of no collection of books in Chicago, at all adequate to the demands of the professional scholar. Private libraries, in this new country, are the creation of a few years growth only, and intended to supply references for the practitioner, whose time is largely occupied with the active duties of his profession.

The books, therefore, are, for the most part, recent text books, and a very limited number of medical periodicals, which serve to complete the literary resources of most physicians. However extensive the collection, this will be

its general character. In its place, this class of works is indispensable, but we have arrived at a stage of professional advancement, when this kind of a library is not sufficient. We need one containing, as nearly as possible, all the ancient, mediæval, modern and current literature of the profession.

It is hardly practicable to have extensive and varied collections, except in public libraries. In our private collections we have one of the elements required to make up this variety. All those of us who have been long occupied in the profession, possess copies of a few old books that are becoming rare. They are scattered about; one or two being in possession of each of a large number of the practitioners of the city and country, rotting on shelves, because never consulted by their possessors. Having been long superseded by modern works, they are practically valueless in private libraries as books of reference. As curiosities, we may treasure up such works as those of Hippocrates, Galen, Celsus, etc., among ancient authors; or even the modern writers, as Cullen's First Lines, Good's Study of Medicine, Dewees' Midwifery, Eberle's Practice, Fordyce on Fevers, Bell & Stokes' Practice, etc., all popular text books thirty years ago, but we would not at present think of relying upon their teaching in practice.

In our private libraries we must have the text books of recent date.

If medical men would send the kind of old books above mentioned to the public library, they would be useful to the whole profession, because accessible to all, and instead of being able to enjoy the benefit of only one or two old books, we would have the use of a large number.

It is not too much, then, to request the physicians of the city and the whole Northwest, to send such books as lie idly upon their shelves, to the library of the Medical Press Association for safe keeping. Our librarian will write in them the names of the donors, the date, and

other items calculated to identify the gift, and give due credit for the bestowal.

The resources of the organization make the accumulation of contemporaneous literature an easy matter. The list of exchanges received for the JOURNAL AND EXAMINER, now numbering nearly one hundred periodicals, and increasing every month, while it affords the profession extensive facilities for keeping abreast of the times, will furnish the shelves of the library with over one hundred volumes annually. Add to this the reception of reviews of all American and many foreign medical books and pamphlets, and it will be seen that our library must grow. We have already been placed under obligations to several physicians in the city for donations of books and volumes of popular periodicals for several years back, and have the promise of a still greater number.

Will the whole profession of the city and neighborhood join us in this enterprise? If they will, the formation of a large and useful library will be the work of but a very few years.

THE *Bouffe* IN MEDICINE.—The *New York Nation* of Dec. 23, 1875, contains an article which illustrates, in a striking manner, the introduction into politics of the central idea of the comedies of the *opéra bouffe*. The complete inversion of the moral world and the social institutions handed down to us from the past, as exhibited in the *Grande Duchesse* and the *Belle Helène*, are mirrored in the pool of New York politics, whose slimy depths have been exposed to the eye of the world.

But the portraitures of the *bouffe* characters can be detected as well in certain circles in Chicago.

For example, during three successive days of last month, there hung, like a pall over this city, a horrible and disgusting stench, that emanated from one of the rendering establishments on the outskirts of the town. The impalpable and nauseating effluvium entered the nostrils of four hundred thousand people. They ate it with their

chops at breakfast, drank it in the evening cup of tea, inhaled it alike in the parlor and bed-room. More than this. It filled hundreds of sick chambers with a revolting suggestion of the charnel-house, and poisoned the air respired by thousands of delicate infants struggling for existence against the other disadvantages of city life. Whose business was it to abate this nuisance that revisits the city ever and again with a recurring periodicity? Not the business of the Board of Health, certainly. It is true that the salaries of these officials are paid out of the pockets of the sufferers. It is true that they report, periodically, the abatement of a certain number of nuisances, while this great head and front of all nuisances obtrudes itself persistently upon the public. Is it, also, true that the proprietors of these rendering establishments occasionally see the officials of the Board of Health, and that the latter are also on such occasions "seen"?

The reason for all this lies in the fact that the Board of Health of Chicago rests upon a political basis, from its august head to its petty policeman. No young medical aspirant, with ambition and ability, need ever hope to obtain official connection with it, by acquiring a knowledge of sanitary science. The medical profession of Chicago is no more responsible for its organization, than for the conduct of a pork-packing establishment. Intimate acquaintance with the "short-haired" element—influence with "the Bosses" and "the Boys"—this is the sole avenue of ingress. This is the *bouffe* stage, gentlemen, where, before the foot-lights, *Prince Paul* and *General Boum* act their droll parts for their own pecuniary profit.

Another illustration of this principle, is to be found in the recent exposure of the officials connected with the Cook County Insane Asylum—an exposure made by a committee of medical men appointed by the Chicago Society of Physicians and Surgeons. In this institution nearly three hundred insane patients are collected. Surely, one would think, the man who is charged with

the professional care of its inmates, is an expert in all the forms of mental and nervous disease—a man who has at least acquired some reputation as a skillful and judicious practitioner. By no means. There was reason for thinking the physician of this asylum had never even received a degree in medicine. The assistant physician was found to have acquired all his lore in one course of lectures attended in this city. The warden, an official superior to both of those just named, was found to be a local politician, the retention of whose position depended upon his party affilations. This, gentlemen, is the result of the *bouffe* principle—the result of an inversion of the rules by which men are guided who do not perform on the comic stage.

One of the leading milk-dealers of our city has long endeavored to secure a rigid system of milk inspection in the interest of those who desire to supply a perfectly pure article for city consumption. There is probably not a respectable physician in Chicago, unconnected with any of its various boards, who does not consider such a measure absolutely essential to the comfort and welfare of the community. Yet all efforts in this direction have proved utterly futile. It is because, gentlemen, they do not do these things in the *bouffe* opera.

All this will be remedied in time. The men who have secured their positions by political influence will be in turn supplanted by men who possess a greater influence. But the medical profession of Chicago, exerting its authority through the committees of its medical societies, has already made itself felt before grand juries and judges and the public. It has tasted of power, and, in accordance with a natural law, will, in the end, exert that power to its fullest extent.

Meantime the Offenbachian doctors will exhibit their travesty of the medical profession to the general public, surrounded by their motley short-haired acquintances. On with the play; the curtain will fall the sooner!

WE NOTICE in the British *Students' Journal and Hospital Gazette*, of Nov. 6, a sharp censure of the medical schools of England. The inefficiency of instruction in the schools is deplored, and the prevalent habit of teaching almost exclusively by lectures is strongly condemned. "From 40 to 80 per cent. of their students are 'plucked' at the examinations of the Royal college of surgeons and other examining bodies." The students are defended as not being either lazy or deficient in brain power; the whole trouble is with the teachers; the zeal of the students is thrown away for "want of a proper guide to direct their studies"; "the cut-and-dried lecture that has done duty for successive generations of students should be dispensed with"; "the demands of science and of the examination room are, demonstrations."

One reason given for so great a per centage of failures is, that, while examinations are "more practical than formerly, the mode of education remains pretty much the same."

We are surprised at this. We had supposed the instruction given to students in England was much more thorough and practical than in our own country, and especially that it was the examiners, not the teachers, who were fossilized.

Perhaps, nevertheless, the critic is right. We most heartily agree with him, however, that the formal lecture through important, is not most important. More instruction should be given by recitations; there should be more of demonstration and more actual observation. The lecture is a great relief to the monotony of continuous reading, and adds greatly to the ability of any one to acquire knowledge. He who hears told the thing he has read, in a different fashion perhaps, retains it doubly well; the lecture is, as a means of education in medicine, a great addition to that of reading. The actual observation of a thing as a phenomenon; the working out of an experiment or a demonstration, and, more than this, the obligation to tell about it, are a great step in advance of both

reading and hearing. That knowledge which is gained through the eye and by actual experience, is easiest acquired and is impressed upon us most indelibly.

The medical colleges in America will have inaugurated a grand reform, when, even if they have fewer or no more lecturers, they have many more demonstrators and tutors and drill-masters. The number of the latter should be at least equal to that of the former—it is a question whether they should not be more numerous.

WE RECOMMEND to an early and earnest consideration of the faculties of our medical colleges, the pointed remarks Dr. Gross makes in his "History of Amer. Med. Literature" on the subject of *Medical Theses.* "Of this variety of medical literature," he says, "our colleges have huge piles, for every spring large additions are made to their archives, usually badly written, not unfrequently ungrammatical, generally devoid of scientific information, and of no use to anybody, for it is not too much to say that not one in fifty affords the slightest evidence of competency, proficiency or ability in the candidate for graduation. Often, indeed, they are not composed by him; and occasionally they are plagiarized, or copied, it may be *verbatim*, from such books as are within his reach, if not actually from the works of his preceptors. Happily for the credit of the schools, few of these productions find their way into print. * * It would be well if, on the birthday of American Independence, a bonfire could be made of this trash, as it exists, without exception, in all our medical schools; and it is devoutly to be wished that the regulation which prescribes the presentation of the inaugural dissertation were abolished." Will the colleges free themselves of this nuisance?

Clinics.

MERCY HOSPITAL.

Clinic by PROF. N. S. DAVIS, *December* 11, 1875.

PARTIAL PARALYSIS AND DISEASE OF SPINE.

CASE I. The first case presented to the class was a laboring man, aged about 28 years, naturally strong and muscular. He stated that he had been subject to occasional attacks of asthma for several years, and last week had considerable cough and soreness in his chest, which had been relieved by an expectorant mixture from the Dispensary.

His present complaint is of general weakness, with pain, more or less acute, in the right side, sometimes extending to the shoulder, and which he attributes to "liver complaint." By a systematic questioning, and physical examination by the professor, the history and symptoms of his case were more fully and accurately elicited, as follows: About two years since, the patient first began to feel a numbness and prickling sensation in his toes and feet, which has continued, with steadily increasing weakness more especially in the right foot and leg; dull pain in the dorsal portion of the spine, with difficulty of raising himself from a stooping position, and some unsteadiness in walking. During the last six months he has had pains, sometimes acute, in the right side, extending from the right margin of the epigastrium along the lower margin of the ribs, and up to the lower angle of the right scapula. There were occasional slighter pains taking the same direction in the left side. He also complained of a distinct sense of numbness and constriction, like a band around the body, just along the lower line of the epigastric and hypochondriac regions. There was well marked tenderness to pressure over the fourth, fifth and sixth dorsal vertebræ, with slight prominence of the

spinous processes, but neither auscultation nor percussion elicited any evidence of pulmonary disease, or of alterations in the viscera of the abdomen. There was some tendency to constipation, with impairment of digestion. After calling attention specially to such symptoms as were of direct diagnostic value, the professor remarked that the partial anæsthesia of the right foot, leg and side, with impairment of muscular motion, pointed to disease in some part of the cerebro-spinal nervous centres, while the definite sense of numbness, like a band around the trunk of the body, and the free, healthy condition of the upper extremities, equally point to some part of the spinal cord below the junction of the cervical with the dorsal portion of the spine, as the special seat of trouble. These facts, with the tenderness to pressure and percussion over the middle part of the dorsal portion of the spine, led to the conclusion that the patient was laboring under a chronic grade of inflammation of the meninges and connective tissue of that portion of the spinal cord, more especially the right half. And from the length of time since the first symptoms were noticed, it was inferred that some degree of thickening and hypertrophy had taken place in those structures, with atrophy of the nerve cells.

The prospect of recovery depends upon the extent of these changes, and the ability of the patient to comply with the conditions most important in the management of his case.

Treatment. Rest in a recumbent position as much of the time as possible; moderate, but persistent, counter-irritation over the affected portion of the spine; alteratives with anodynes internally for the first two weeks, and subsequently the more tonic class of iodides, constituted the treatment recommended.

CASE II. The attention of the class was next called to a little girl, aged five years, who had first been presented to the class four weeks previously, with well marked paralysis of the portio-dura of the seventh pair of nerves on

the right side of the face. At the time of her first presentation in the clinic, her mother stated that about four weeks previously, the child had been attacked with acute pain in the right mastoid region, accompanied by local tenderness and some swelling, with considerable general fever. The pain and fever disappeared in a few days, but slight swelling over the mastoid process and under the ear of the right side, with hyperæsthesia of the scalp over nearly all of that side of the head, and complete loss of expression in the same side of the face, remained. The child received no medical treatment, and continued in the condition just mentioned, until her first visit to the clinic four weeks since. At that time, the right upper eyelid drooped a little, and the lids failed to close during sleep; an effort at laughing caused the mouth to be drawn largely to the left; and there was a little swelling, apparently from periosteal thickening, over the right mastoid process, and hyperæsthesia in touching the hair or scalp over the right temporal and right half of the occipital regions. In all other respects the child appeared well. The diagnosis then made was, that the child had been attacked with subacute inflammation of the periosteum covering the mastoid part of the temporal bone and adjacent areolar tissue, accompanied by sufficient plastic exudation to cause thickening of the inflamed structures, and pressure upon the trunk of the portio-dura nerve, where it passes out from the cranium. After the first few days, the fever and more acute symptoms subsided, but leaving that nerve paralyzed, and the occipital and temporal branches of the fifth pair involved enough to cause the hyperæsthesia of the right side of the scalp. With this view of the nature of the case, it was stated that the leading indications for treatment were, to remove the slight inflammatory action still remaining, and to cause a more complete disintegration and reabsorption of the exudative material that still pressed injuriously upon the trunk of the nerves. To accomplish these purposes, the following alterative and ano-

dyne mixture was ordered: ℞. Sodi. Iod., ʒijss; Hydrarg. Bichlorid., gr. i; Tinct. Conii, ʒiv; Syrup. Prunus Virg., ʒiv; Aquæ, ℥iij. Mix.

The mother was directed to give the child twenty drops in a little water, four times a day, for the first week, and three times a day the second week, and then bring her again to the clinic. This was done, and when she returned at the end of the second week, the only noticeable change was less hyperæsthesia of the right side of the head, more perfect closure of the eyelids during sleep, and no perceptible swelling either behind or beneath the lobe of the ear. Still there was no visible action of the muscles of the right side of the face in laughing. The same prescription was continued three times a day for one week longer, and then reduced to twice a day. During the third week the mother began to notice some expression in the right side of the face, which has steadily increased, until now, at the end of four weeks from the commencement of the treatment, the paralysis is entirely removed, and the child appears well. The class was cautioned against the too prevalent custom of adopting a routine treatment by electricity, strychnine, etc., for every case of paralysis, without due attention to the special pathological conditions causing the paralysis.

COOK COUNTY HOSPITAL.

SERVICE OF PROF. JOS. P. ROSS. (Reported by D. A. K. STEELE, M.D.)

CASE I. *Peritonitis—Death.*

D. F., æt. 24; Irish, laborer; admitted Aug. 18th, 1875. Has been in poor health for the past year, suffering from "erysipelas of the legs," as he called it. Six weeks ago he began to suffer from headache, anorexia and pain in the sides. About three weeks ago he was attacked with nausea and vomiting at night and with severe diarrhœa. The latter has continued to date, with

occasional vomiting after eating. He has been steadily losing flesh in the meantime. Pulse 132, and feeble; temperature, 101° F.; respirations, 36; tongue dry and red at the edges; pain in the head, sides and abdomen; four stools daily, thin and yellow; abdomen very tympanitic. Was ordered emulsion of laudanum and turpentine, with eight grains of quinine daily.

Aug. 20th, A. M.—No better, did not sleep well; four stools in the night, three this morning. Abdomen still distended with gas; tongue furred and dry, red at tip. Pulse, 114, small and feeble; temp., 100.2; resp., 36. P. M.—Pulse, 120; temp., 99.2; resp., 32.

21st, A. M.—Pulse, 90; temp., 98; resp., 30. Rested well; three stools during night; pulse larger and stronger; tongue covered with heavy white fur. Heart is displaced upwards; fluctuations found all over abdomen, which is very tender on pressure. P. M.—Pulse, 120; temp., 101.2; resp., 36. Two stools during the day. Ordered one grain of crude opium every four hours, and turpentine stupes to the abdomen.

22nd, A. M.—Slept fairly; pain not so severe; abdomen distended with fluid, and exquisitely tender on pressure. Pulse a little stronger; tongue coated white; pulse, 90; temp., 98; resp., 36; considerable dyspnœa; two stools last night, one this morning.

23rd.—Pulse, 132; temp., 101; resp., 24; pulse very small and feeble. Has not slept. Three stools during night. Cannot retain his medicine.

27th.—Slept well; does not suffer much pain; vomits everything but milk. Tongue still heavily furred and dry. Pulse, 108.

26th.—Pulse, 126 very weak; vomits frequently.

Sept. 4th.—Patient continued sinking and died to-day.

Autopsy, twelve hours after death, revealed extensive inflammation of gastro-enteric tract, also of peritoneal membrane; firm adhesions of all abdominal viscera. Abdomen contains a quantity of flaky serum.

CASE II. *Cirrhosis—Pleurisy with Effusion—Endopericarditis—Death.*

C. J., æt. 68; German, laborer; admitted Aug. 28th, 1875. Patient unable to give an explicit history, but states that he has had a cough for three or four months. Three weeks ago he had a chill, followed by fever and an aggravation of the cough. Expectorated thick, yellowish white sputa. He is well nourished, but the circulation is sluggish in hands and face. Abdomen, ascitic. Admits that he has been a hard drinker. Pulse, 120, feeble and irregular; temp., 99.2; resp., 26. Tongue, furred and whitish.

Percussion dullness, purely bronchial breathing, crepitant rales, and increased vocal resonance over lower right chest. Exaggerated respiratory murmur over upper portion of right and whole of left chest. Hands and face cyanosed; dyspnœa excessive. Was ordered, every two hours, quinine and opium.

Sept. 1st.—Patient weaker; anorexia; dyspnœa more marked. Pulse extremely feeble and irregular.

Sept. 8th.—Death.

Autopsy, eight hours after death. The right pleural cavity was filled with fluid, right lung collapsed; no crepitation.

Pericardial sac filled with fluid; its inner surface and the outer surface of heart covered with lymph. Left ventricle very much hypertrophied; aortic and mitral valves thickened and roughened. Liver cirrhosed, small and nodulated, spleen softened and disorganized, abdomen filled with fluid.

Kidneys congested and indurated; smaller than normal. Dura mater everywhere adherent to cranium; membranes covered in places by lymph and adherent to brain; venous congestion of the latter; its substance softened.

CASE III. *Alcoholism.*

J. C., æt. 39; American, printer; admitted Sept. 10th, 1875. States that he has been drinking quite freely for the past three weeks, and during the last week has been

drunk nearly all the time, eating little or nothing. Has had almost continuous diarrhœa during this period; recently the stools have become dysenteric. He is well nourished, skin about normal, eyes congested, pupils dilated. Constant muscular tremor, and marked insomnia. Discharged, cured, after treatment by opium, chloral, and potassic bromide.

CASE IV. *Severe Colica Pictorum and Palsy from use of a Cosmetic.*

Maggie P., æt. 21; American, housewife; admitted July 12th, 1875. Was always well enough to do her work until two weeks ago, when she had severe gastric and intestinal pain with vomiting; her bowels had been loose, but then became constipated. For the past four years she had been using, daily, a cosmetic of carbonate of lead. Previous similar attacks were relieved by treatment.

Patient is anæmic; pulse, 90; temp., 98; tongue furred and dry; blue line around margins of gums; eyes puffy; appetite poor; constant pains across the stomach, and vomiting. Paralysis of the extensor muscles of forearm giving the "drop wrist"; metallic taste in the mouth.

Recovery, Sept. 18, after exhibition of ten grains of potassic iodide three times daily, and disuse of the cosmetic.

CASE V. *Double Pleurisy—Paracentesis—Death.*

T. B., æt. 35; Irish, coachman; admitted Oct. 11th, 1875. Patient was well until one week ago when he exposed himself to a draft of cold air while perspiring freely. The same night he had a severe chill, followed by fever and pains in the head, body and limbs, also severe sticking pains in the right side below the nipple; could not take a long breath, began to cough, pains aggravated by coughing. These symptoms have continued ever since. For the last four days has been unable to lie upon the left side.

Patient is well nourished, skin hot, tongue heavily

coated; pulse, 114; temp., 101; resp., 36. Complains of loss of appetite; pain in right chest; he coughs and expectorates a thick, white, tenacious sputum.

Respiration almost wholly abdominal, loss of motion and partial obliteration of intercostal spaces in right side. Percussion gives flatness over the right chest anteriorly and posteriorly below the line of the nipple; no distinct postural change of line of dullness.

Diminished respiratory mumur and absence of vocal resonance over lower wo-thirds of right chest; exaggerated respiratory murmur throughout left chest, with mucous and sonorous rales; a few moist rales are also heard at apex of right chest; tubular respiration below right nipple anteriorly. Taking of a mixture of ammon muriat., tart. emet. and morphia, the patient did pretty well until Oct. 14th. That morning he complained of severe lancinating pains in lower part of left chest, and the examination detected distinct pleuritic friction below the nipple; applied hot flaxseed poultice, and ordered Dover's powders of gr. x each. In the afternoon the condition of the patient grew much worse; dyspnœa and cyanosis of the face had risen to an alarming degree, and on physical examination an exudation was found in the left pleural cavity. Under such circumstances Dr. Ross performed paracentesis of the right thorax, and, by means of the aspirator, withdrew about two quarts of a straw-colored serum. The patient felt great relief immediately after the operation, but after a restless night he rapidly failed, and died on the next morning.

Autopsy, six hours after death. Extensive exudation of lymph upon costal and pulmonary pleura of right side; about two quarts of serum in right pleural cavity. Left pleura roughened slightly, old adhesions present; about one quart of serum in left pleural cavity.

Summary of Progress in the Medical Sciences.

I. Anatomy and Physiology.

1. *Congenital Myo-Sarcoma of the Kidneys.* J. Cohnheim. (*Virch. Arch.* LXV; *Centralb. f. chir.*, 1875, No. 51.)

A girl, aged one year, died of a large tumor which filled the abdominal cavity almost entirely, crowding the intestines to the right side, and the diaphragm upward, and completely compressing the bladder. The post-mortem examination showed this tumor to have grown out of the substance of the left kidney. The larger half of this kidney still existed in the shape of a small, smooth appendix, clinging to the tumor. This was composed of a great number of smaller roundish tumors, and one such tumor was also contained in the right kidney, which otherwise was of a normal size. The tumors resembled the large fibrous tumors of the uterus, as well as medullary osteo-sarcoma. But the microscope showed that the larger portion was built up by *striped muscular fibres;* in a few smaller lumps only, the structure of the round-cell sarcoma was found.

The case is very interesting, on account of the size and large mass of the muscular growth, and because a neoplasma, mainly composed of striped muscular fibres, has never before been found in the kidneys. From the fact that both kidneys showed the same pathological condition, the morbid process may be considered as a "vitium primæ formationis."

2. *The Lymphatic Vessels of the Joints.* H. Tillmanns. (*Centralb. f. chir.*, 1875, No. 51.)

The anatomical distribution of the lymphatics, in the synovial membranes, has lately been made the object of histological studies by Tillmanns, in Leipzig. In order to inject these vessels, he filled the joint with a colored fluid, and tried, by alternate flexions and extensions, to force it into the lymphatics of the synovial membrane. Failing with this method, he injected a solution of nitrate of silver (half per cent.) into the tissues of the capsule by the hypodermic syringe. By this method he obtained very nicely injected preparations, and ascertained the following facts: The superficial lymphatic vessels are situated directly under the epithelium of the synovial membrane, but they have no open communications (stomata) with the cavity of the joint, like the lymphatics of other serous membranes. The finest capillaries of the blood vessels do not seldom crowd in between the epithelium and the lymphatics. Further on in the tissues, numerous and larger lymphatics are seen to wind around the blood vessels. The lymphatics of the capsule could never be traced into the osseous tissue, nor could any be discovered in the cartilage.

3. *A New Sphygmograph.* A. T. KEYT, M.D. (*N. Y. Med. Jour.*, Jan., 1876.)

This instrument, which the author claims embodies an original application and working out of a principle heretofore in use, resembles the sphygmographs previously in vogue, that of Marey most, but differs in the means of receiving and using the force of the pulse. While the older instruments made use of a metallic spring which was elevated at every pulse-beat, this one utilizes the elastic membrane and a liquid to "receive and transmit to the tracing lever the movements of the pulsating artery." There is a tube, with an expanded base, across the open end of which an elastic membrane is stretched; the other end of the tube is also expanded slightly, and has another elastic membrane covering its orifice. This tube being full of fluid, the membrane first described is pressed firmly against the artery—of course the membrane at the other end of the tube, through the medium of the fluid, pulsates with the artery. The broad, flattened head of a pin, rests upon this membrane, and rising and falling with every oscillation of the membrane, its impulses, by a simple contrivance, are transmitted to a tracing lever, and so the sphygmographic workings are registered. The tracings are made upon the surface of smoked glass, which is propelled against the tracing lever by means of clockwork, such as is used in Marey's sphygmograph. The instrument, as described, is ingeniously constructed, and has a number of mechanical devices for regulating, to a nicety, the working of the machine. The straight, vertical glass tube, with the expanded base and membrane, the tube graduated in inches and fractions, and filled with water, Dr. K. uses alone for the purpose of presenting to the eye, in the oscillations of the fluid, a representation of the pulse-beat. This he names the sphygmometer, and it forms a part of the sphygmograph, so that, by the simple turning of a thumb-screw, the instrument may be used as either a sphygmometer or a sphygmograph. By placing the bulb of the instrument over the apex of the heart—the patient being in the supine position—it is either a cardiograph or cardiometer at will.

The author thus summarizes the advantages of his invention: "The new sphygmograph is a very convenient instrument. It is light in weight, small in bulk, portable. It need not easily get out of order; the membranes even, if taken care of, will maintain their integrity for a considerable time, and when at last these show failure, they can be readily replaced by new ones. It can be easily placed and retained in position. It needs no strapping to hold it in position." "It is adapted to trace the pulsations of any of the superficial arteries; and, as a cardiograph, to trace the heart's pulsations with the same facility that it traces the arterial." "Such is the facility of its employment, that it entails upon the very feeble no uneasiness or annoyance, and the pulses of infants can, without trouble, be recorded by it."

Quite a number of tracings are shown, made on the same artery at the same sitting, with the new and Marey's instruments respectively, which, it must be said, give a very creditable exhibition of the capacity of the former.

4. *Physiological action of Lobelina.* OTT. (*Phila. Med. Times*, Dec. 11, 1875.)

Dr. Isaac Ott, Demonstrator of Physiology, University of Pennsylvania, has again favored the medical world with another admirable therapeutic study. This time he investigated the active principle of lobelia, and he gives the following conclusions as to its physiological action:

1. Lobelina, like nicotina and conia, paralyzes the motor nerves.
2. Lobelina does not destroy the functions of the sensory nerves or the striated muscles.
3. Lobelina, nicotina, and conia, depress the excitability of the spinal cord.
4. Lobelina destroys voluntary movement and co-ordinating power.
5. It temporarily decreases the pulse, followed by a subsequent increase, often beyond normal. Nicotina does the same. Lautenbach states that conia increases the heart-beat.
6. This action on the pulse is due to an action on the cardio-motor ganglia, provided that atropin paralyzes the cardio-inhibitory ganglia.
7. Lobelina, nicotina, and conia, temporarily decrease the pressure, followed by a rise much beyond normal.
8. This increase of pressure is due either to a peripheral vaso-motor action, or to an excitation of the spinal vaso-motor centres.
9. Lobelina, nicotina, and conia, paralyze the pneumogastrics.
10. In large doses it paralyzes the vaso-motor centre, both to direct and to indirect irritation.
11. Lobelina, nicotina, and conia, accelerate the respiratory movements.
12. After section of the vagi, lobelina and conia cause no increase of respiratory movements.
13. It increases and then decreases the temperature; nicotina and conia decrease the temperature.

II. OTOLOGY AND SURGERY.

1. *A New Method of Inflating the Middle Ear.* JOS. GRUBER. (*Allg. Wiener Med. Zeitung*, 1875, No. 42.)

In order to force air into the Eustachian tubes without using a catheter, the upper pharyngeal space must be tightly closed against the fauces. This is accomplished in the simplest way by the act of deglutition as shown by Politzer's method. *But the same can be achieved also by simply crowding the root of the tongue against the posterior portion of the palate while a forcible expiration is made simultaneously.* During this procedure the root of the tongue shuts off the cavity of the mouth against the fauces and pushes the soft palate backward and upward, and the simultaneously expired air raises the soft palate so much that it forms a complete diaphragm between the fauces and the space above the velum palati. The expired air,

therefore, escapes neither through the mouth nor through the nose, as one can readily prove by holding a light before the nose and mouth; it will not be moved by an air current as it would be if the air passed out of these orifices. Even an unintelligent person can carry out the desired movements of the tongue and velum palati by pronouncing such monosyllables as hack, hick, hock, huck. And by holding the tongue in the position which is necessary for the pronunciation of ck, (or kk), the patient can, at his pleasure, keep the naso-pharyngeal space closed against the fauces for some minutes. This new method is executed like Politzer's : when the ivory tip of the air bag is inserted into one nostril and the nose hermetically closed around it with the fingers of one hand, the patient is directed to pronounce one of the above syllables while the bag is emptied. The advantages Gruber claims over Politzer's for his method are:

1. It does away with the swallowing of water against which many patients have a great antipathy (!), especially because they dislike to drink out of a glass which was used by other persons.
2. One can force the air into the middle ear for some time in succession, because the patient can prolong the pronunciation of kk.
3. One can auscultate the middle ear.

2. *Styptic Cotton in the Treatment of Otorrhœa.* THOS. G. MORTON. (*Philad. Med. Times*, 1875, No. 205.)

Encouraged by the success Morton obtained in a case with the styptic cotton about two years ago, he has since used no other treatment in a large number of cases of otorrhœa, and always with the same excellent result. Before using the cotton, the ear should be thoroughly cleansed with tepid water and the canal then wiped out; then a portion of the styptic cotton (large enough to fill the meatus) is carried in until the plug rests close to, but is not in contact with, the drum. The first plugs should be changed daily, then less frequently; no pain arises from the use of this preparation. As styptic cotton becomes friable and breaks up after a few months' exposure, it should be made fresh from time to time.

3. *Salicylic Acid in Aural Discharges.* J. J. CHISOLM, M.D. (*Western Lancet*, 1875, No. X.)

Seeing reports of the advantages derived from sprinkling powdered salicylic acid upon the surface of chronic ulcers, it was inferred that this new disinfectant may prove of value in aural surgery. Dr. C.'s experience was chiefly with the acid in powder diluted with calcined magnesia or oxide of zinc; though the pure acid could be very safely applied to the discharging tympanic membrane. He used one part of salicylic acid to two parts of magnesia. The ear being thoroughly cleansed, the powder was blown into the ear through a quill or a laryngeal powder-blower. The effect in all cases has been good; its controlling influence being much more marked in some persons than in others. In most cases the application has to be repeated daily before the aural discharge is stopped.

4. *Salicylic Acid as a Dressing for Wounds.* (*Philadelphia Med. and Surg. Rep.*, Jan. 1.)

At a society meeting in London, lately, Mr. Callender brought forward a series of cases illustrating the use of this agent as an application to wounds. The following preparations were chiefly employed: (*a*) Phosphate of soda, three parts; salicylic acid, one part; water, fifty parts. (*b*) Salicylic acid, one part; olive oil, forty-nine parts. (*c*) Salicylic acid, one part; bicarbonate of soda, half a part; water, 100 parts. Summing up his observations, Mr. Callender arrived at the following conclusions: Putting together its good points, he found that salicylic acid was free from odor, and so far was acceptable to the patients; that wounds healed under its influence, and, during the progress of repair, were free from bad smells; that, unless strong with spirit, or but little diluted, it did not cause local pain. Its bad points seemed to be these: That, above the strength of two per cent., it caused local irritation, with some constitutional disturbance; and if the patient had a delicate skin, even the weak preparation was a source of trouble; that there was more discharge from a wound dressed with salicylic than there was when carbolic acid was used; that its influence upon a recent wound, as after an operation, was not efficacious against the occurrence of decomposition as was that of carbolic acid, chloride of zinc, or of boracic acid; that the repair of a wound was less active, and the granulations, if any, more flabby than when other simple or antiseptic dressings were employed. On the whole, while admitting its use as a local application to be fairly commendable, Mr. Callender thought it inferior in its antiseptic properties to other agents, and did not consider it to be a remedy meriting the strong recommendations which had been given it by some of those who had made trial of it.

5. *Injections of Carbolic Acid in Poisonous Wounds.* KLAMANN and DORING. (*Allg. Med. Centralz.*, 1875, Nos. 99 and 101.)

Klamann reports the following case: On July 9, a young man who was stung in the nose by an insect, called on him with œdema of the right eyelids, and considerable swelling of the right side of the nose. The use of an ointment of carbolic acid did not arrest the inflammation, and by the next evening the whole right half of the patient's face was frightfully swollen. About fifteen minims (one gramme) of a two per cent. solution of carbolic acid was injected by an hypodermic syringe at the little red point which indicated the bite of the insect. The patient almost fainted, but the effect of the injection was quick. Within twenty-four hours the œdema disappeared and the patient was completely cured.

In Doring's case the œdematous infiltration had extended from the fingers to the shoulder in twenty-four hours after an insect had deposited some poisonous matter in a recent scratch of the skin at the dorsal side of the right hand. The skin of the swollen arm was hot, purple, and in

three places it showed a dusky color. The patient, a robust man, was quite feverish. Five hypodermic injections, of fifteen minims each, of a two per cent. solution of carbolic acid, were made—three injections into those discolored spots and two above the line of œdematous infiltration into the healthy tissues. In the afternoon the injections were repeated, and the arm was dressed with cold water compresses during the night. On the 17th, patient felt better; the redness and swelling of the arm had decreased in intensity; the dusky spots had disappeared; four subcutaneous injections. And the following day the arm was all right.

6. *Sutures of Tendons.* TILLAUX. (*Centralb.*, 1875, No. 2.)

The tendons of the extensor of the little and ring fingers were torn by a hook; the wound healed, but one month later the two fingers were bent into the palm of the hand and could not be used at all. By the use of Esmarch's bandage, Tillaux tried to search for the tendons, but he could find the peripheric ends only. Exposing the tendon of the middle finger, he made a buttonhole in it, put the peripheric ends of the tendon of the little and ring fingers through it and fastened them together by a metallic suture. Extension and flexion of both fingers were completely restored by this operation.

7. *Removal of the Anterior Five Tarsal Bones and the Heads of the Metatarsal Bones.* W. W. DAWSON. (*Cincinnati Clinic*, 1876, No. 1.)

This operation was first performed by P. H. Watson, who gave an account of it in the *Edinburgh Med. Journal*, April, 1874. It is effected by making an incision on the inner and outer sides of the foot, between three and four inches in length; dissecting the soft parts off the dorsal and plantar surfaces of the tarsus, from the outer and inner sides, until the whole extent of the osseous tissues to be removed is deprived of its soft coverings; the diseased spongy bones, then, are removed by disarticulation and the use of a key-hole saw. Dawson performed this operation successfully on a little girl, æt. 6 years, in November, 1874. About eighteen months previous to the operation she was struck on the dorsum of the right foot. The blow did not seem to be a hard one, but violent inflammation followed it, involving first the soft parts and passing thence to the tarsus. In July, 1874, an abscess was formed on the inner border of the foot; when it was opened the tarsus was found in a carious condition. Another abscess was formed, to the distal side of the first, and the junction between the tarsus and metatarsus was found to be involved in the disease. The suffering of the child was very great; the pain at night unusually severe, and the foot exceedingly sensitive. Watson's tunneling operation was performed, the surgeon following his directions very closely; and by the use of Esmarch's bandage there was not an ounce of blood lost. The result has been most satisfactory; with her shortened foot the girl walks without a limp.

8. *Treatment of Varicocele and Attendant Irritability of the Genital Apparatus by Compression.* Dr. RAVOTH. (*Berl. Klin. Wochenschr.*, 1875.)

The apparatus employed by Dr. Ravoth is a combination of the suspensory bandage with an additional appliance for producing pressure, which differs from the apparatus hitherto in use and which has been condemned by Mr. Syme and others, in that it affords an easy and regular compression. It is claimed that without irritating, it accelerates the circulation and restricts the determination of blood to the parts involved, increases the tone of the vein and *cremaster*, and empties the vein by compression over the regurgitating blood column.

The first case cited, and the only one which for the sake of illustration may be cited here, is one of a number treated successfully by the method under consideration.

X., a student, age 21, suffers from a left-side varicocele, which dates back to his 16th year. He is unable to assign a cause. No evidence of hereditary predisposition. Has never been guilty of onanism. Three years ago emissions became frequent, the number of which gradually increased until, at last, they occurred, at least, nightly, often even twice in the night and during the day, also, without sexual desire or erection. There was a certain rudeness of demeanor and permanent despondency of mind. Patient of medium size, not of weakly habit, pale, expression dejected, and apparently older than he is. Appetite voracious, digestion, with the exception of sluggishness at stool, undisturbed. The varicocele is fully developed. The scrotum hangs loose and flabby, despite a suspensory bandage; measures 8 ctms. from the ring to the left testicle. Superficial veins are not dilated, neither is the spermatic cord. On the contrary, the left *venæ spermaticæ* have become considerably lengthened and form a cylindrical convolution around the testicle, atrophied to the size of a pigeon's egg. Upon pushing the left testicle somewhat upwards, the circumference was measured and found to be 12 ctms. The convolution has a flabby, doughy feel, but the veins may be easily distinguished from the *vas deferens*. No pain of any kind. Patient was under my care from June 17 to Oct. 19—four consecutive months. The treatment was begun with the application of the pressure-appliance in combination with the *suspensorium*, June 17th. During the first few days he had to learn how to manipulate and regulate the compressor. He increased the pressure by means of a *ratchet* two to three hours daily, and took it off altogether during the night. On July 2nd, there was a remarkable improvement. The length of the varicocele was only 6, and the greatest circumference 10½ ctms. But two nocturnal emissions had taken place in the last eight days, and the diurnal waste had ceased altogether. July 8th, patient in great distress of mind; complained of a return of the emissions, and was directed thereupon to have his back rubbed morning and evening with a liniment composed of tinct. canth., 5.0; sp. form. 150.0, (this has been found also very useful in enuresis noct.), and to take drops consisting of acid. phosph. and. aq. amygdal., *aa* 20—25 *ter die*, and at bedtime a

powder of lupulin, 0.3; camphor, 0.03. July 28, substantial improvement. Length of varicocele, 5; circumference, 10 ctms. Both nocturnal and diurnal emissions ceased. Much improved in spirits. From this time on all other means were discontinued, the patient wearing the compressor only. Oct. 19, saw him for the last time. Was very well; rode horseback daily without any aggravation or increase of the varicocele, which immediately after a brisk ride measured 5 ctms. in length and 10 ctms. in circumference. The left testicle equaled the right in size and other qualities. The emissions have not returned.

In the remaining cases cited in this lecture, the best results followed upon the use of the compressor and *suspensorium*, without collateral measures.

Several English surgeons have recommended this method of treatment and reported favorably, to wit: Curling (*Lond. Med. and Surg. Trans.*, xxix, p. 259), Morton (*Dub. Quart. Jour. of Med. Sci.*, 1851, p. 319), and Thompson (*Monthly Jour. and Retrosp. of Med. Sci.*, No. xix, November, 1848).

It is remarkable that these surgeons speak only of varicocele, while the secondary irritability is mentioned only by Morton.

Concerning the comparative frequency of varicocele the subjoined statistics are interesting and significant. Of 6,025 rejected, out of 17,540 enlisted in 1844, 229 were rejected for hernia, 424 for varicocele and 582 for varix. In 1845, of 13,370 enlisted, 4,146 were rejected, of which, 264 for varicocele and 227 for hernia. Of 140 cases of varicocele, 122 were left side, 6 right side and 2 double. Dr. Ravoth's observation yields 2 per cent. recti-lateral and 2 per cent. bilateral. These statistics show plainly the demand upon our attention, to which these affections are entitled.

Slavjansky has accomplished remarkable results by exciting the N. splanchnici by electricity, creating an acceleration of circulation in the cava, (*Arbeiten aus dem Physiol. Institut in Leipsig*, 1874). Though electricity and compression are widely different agents, there is yet a certain analogy in their *modus operandi*.

III. Practical Medicine.

1. *Strangulation of a Loop of the Ileum by a Band of the Mesentery.* Judson Bradley, M.D. (*Detroit Review*, January, 1876.)

A girl six years old, having previously enjoyed good health, was attacked suddenly after dinner, with pain in the abdomen. With all the symptoms of intestinal obstruction the child lingered ten days and died of inanition.

Post-mortem, there was found no intussusception, but a knot of ileum "bound by a band of what, on closer inspection, proved to be a portion

of the mesentery, holding in a peculiar manner about two feet of ileum so closely that nothing could pass." The mesenteric glands were enlarged, but there was no other pathological condition. The knot was about one foot from the cœcum, "and close to the spinal column on the right side." The author is at loss to account for the condition discovered.

[Is Dr. B. sure the child had not months before had a localized inflammation in the abdomen?—ED.]

2. *Local Treatment of Chronic Dysentery.* T. GAILLARD THOMAS, M.D. (*N. Y. Med. Jour.*, January, 1876.)

A case is here reported of chronic dysentery of five years' standing, following an acute attack, which had resisted about all the known or frequently used forms of treatment, administered by all physicians. The patient was a woman, who stated that during the five years of its existence acute attacks had been frequently engrafted on the chronic malady, apparently excited by indiscretions in diet or unusual fatigue. The smallest number of dejections daily, during the whole period was 8, but it was not unusual for 27 or more to occur. At the time the local treatment was begun she was in a "desperate condition" of debility. Dr. T. placed the patient in the left lateral position and under an anæsthetic, and, with the aid of a long duck-bill speculum and a retractor, explored the rectum to the sigmoid flexure. Washing off the mucous membrane it "was seen swollen, œdematous, hanging in hæmorrhoidal masses, and studded with deep ulcers with grayish bottoms. It was of a deep red, almost violet hue."

At a subsequent examination of the same character, from a swab of wet cotton on a whalebone rod, all the ulcers from the sigmoid flexure to the anus were lightly touched with commercial nitric acid. The cauterization was carefully graduated, so that the possibility of any sloughing was avoided.

Only a little pain was experienced on recovering from the anæsthetic, and the patient declared afterward that this gave her the first real respite she had had for five years. Two other similar applications were made at the interval of a week each, and the patient was practically cured. She soon returned to her home and declared herself well. Rest and the milk diet were insisted on during the treatment.

Dr. T. thinks, with care to avoid such cauterization as to produce sloughing, there is no danger of rectal stricture from the use of nitric acid. This treatment originated with Dr. R. B. Maury, of Memphis, Tenn., who had treated twelve cases, eleven of which recovered. The caustic he used, however, was nitrate of silver, in strength from the solid stick to that of a solution of a drachm to the ounce of water. He thinks the caustic is beneficial not only in stimulating the healing of the ulcers but in blunting the sensibility of the irritable rectum, thus restoring quiet to the whole intestinal tract.

3. *The Pathology of Follicular Disease of the Throat and Air Passages.* BEVERLY ROBINSON, M.D. (*Am. Jour. Med. Sciences*, January, 1876.)

This disease—the clergyman's sorethroat—is here held to be a follicular inflammation, and is due to a diathesis or constitutional tendency. The cases are characterized locally by "granulations" on the pharynx, velum, pillars of the fauces and tonsils. These are small glistening bodies, often not larger than a pin's head, and resembling herpetic vesicles covered by mucus. Sometimes there are unpleasant sensations in swallowing and more or less hoarseness and aphonia; sometimes neither of these. No constitutional character, other than that mentioned, specially predisposes to the disorder, nor does the work of public speaking necessarily do this.

Dr. R. believes that at the beginning of an attack there is an infiltration and thickening of the membrane, and that later there is an atrophic degeneration of the tissues—the mucous membrane, the submucous tissue and the muscular fibres underlying the membrane—by which there is an increase in the antero-posterior diameter of the pharynx. When the glands of the pharynx become ulcerated, as they frequently do, he believes it due to a want of nerve force from an interstitial *neuritis* of the nerves supplying the part. This neuritis explains also the symptoms of pain and disagreeable sensations in the throat, as well as the aphonia without laryngeal lesion, so frequently attendant on this disorder.

Local treatment alone is not competent to cure this affection—general treatment, as well, is always required.

4. *Post-nasal Catarrh.* BEVERLY JOHNSON, M.D. (Read before N. Y. Co. Med. Society, Sept. 27, 1875.)

Dr. Johnson thinks the disorder under consideration is little understood especially as to its pathology. Post-nasal catarrh is not ordinary rhinitis; it is not acute or chronic coryza, however the latter may predispose to it, but it is chronic *follicular* disease of the nasal and naso-pharyngeal cavities. He believes it to be merely a local determination of a diathetic state, and that it differs nowise in nature from chronic follicular disease of the throat and remaining portions of the air passages.

Follicular disease of the naso-pharyngeal space has two constant symptoms: 1st, a sensation of fullness and *stuffiness* in the region affected; and 2nd, the falling down from above the palate and posterior nares of particles of mucus, varying in physical characters. No other symptoms are pathognomonic. Sometimes this mucus may be seen trickling down the posterior wall of the pharynx. By the rhinoscopic mirror at times it may be seen hanging like stalactites from the roof of the pharynx. In advanced cases masses of this mucus become inspissated, thick and hard, and irritating the part produce ulcers and fetor. Ulcers are found on the septum, roof of the posterior nares and vault of the pharynx, and occasionally on the turbinated bones and walls of the nasal fossæ.

Systemic treatment is of first importance—iron, quinine, cod-liver oil, arsenic and strychnia for tonics. Such medicaments as, given internally, exert a beneficial effect on the glands and mucous lining of the throat and nose, are next of value.

Of medicines which act in the last mentioned way—when patients are free from any other diathesis, as herpetic, gouty, syphilitic, scrofulous and tubercular—he classes as most valuable, sulphur, cubebs and ammoniacum. The first he administers in the water of the white sulphur springs of Sharon, a tumblerfull three times a day. Of cubebs he gives fifteen grains of the powder, in a mixture, every two or three hours, for a number of days; and, after a few days of rest, resuming it again. Ammoniacum he gives in doses of j—iij grs. Local treatment is not so efficacious as usually supposed. The douche has been greatly abused, by being used with too cold solutions and too vigorously; great damage has been done to the organs of smell and hearing.

Solutions applied to the diseased part are usually too weak—yet there is great danger of making them too strong. The preferable local medication is by spray and powders. The spray should be used simply warm. The best formula is this: R. Acidi Carbol. liq. m xi; Boracis, Sodii bicarb. *aa* dr. ij; Glycerini, dr. vij; Aquam ad. oz. viij. Mix. Used morning and evening for five minutes by means of a hard rubber atomizer. Of powders to be thrown up behind the palate by a powder blower, he gives preference to one made of equal parts of powdered iodoform and camphor and two to four times the amount of powdered acacia—to be used one or more times daily.

5. *Pulmonary Collapse.* H. A. Dubois, M.D. (*Trans. Med. Soc. California*, 1874–5.)

The writer of this paper believes that in many cases of so-called lobular pneumonia in children, there is nothing but collapse of portions of the lung superadded to a bronchitis, either mild or severe. When in the midst of a bronchitis there occurs a sudden and permanent increase in the frequency of respiration without an apparent exaggeration of the inflammation, he believes the condition is quite sure to be one of collapse. Auscultation and percussion are of very small diagnostic value.

An illustrative case is recorded. A child of five years old had some obscure ailment that was guessed to be malarial; soon the breathing became rapid and symptoms of bronchitis slowly supervened. Shortly the respirations became 50—60 per minute, afterward they reached 80, 100, and finally 130, while the "pulse was never over 120—130 and frequently much lower, and a temperature never higher than F. 102° and often as low as F. 97.5°." For five months this rapid respiration had continued—long after all evidence of inflammation had disappeared.

All expectorants and depressing measures did injury; only food and tonics and stimulation were of any value. Dr. Dubois believes in all such cases the last mentioned treatment should be resorted to.

6. *Encephaloid Disease of the Lung.* G. G. TYRRELL, M.D. (*Trans. Med. Soc. Cal.*, 1874–5.)

A case is here reported of this disorder in a girl of fourteen, who had been previously healthy, developed insidiously and slowly at first, being such as might attend incipient phthisis It was only seven weeks before the fatal termination of the case that the child was taken out of school because it was supposed she was studying too hard. A month later, when professional aid was called, the girl was able to walk about, had no subjective symptoms but shortness of breath and slight weakness. On examination, the left chest was found almost perfectly solid. The heart was crowded to the right side.

The growth developed rapidly, a tumor the size of a large cocoanut appearing under the arm, and death occurring by asphyxia in three weeks. Exploration of this tumor a few days before death, with the expectation of finding it an accumulation of fluid in the pleura, discovered it to be an encephaloid mass involving the lung.

IV. THERAPEUTICS.

1. *Treatment of Tapeworm by Creosote.* Mr. BRICKWELL. (*Med. Times and Gaz.*, Sept., 1875.)

The writer states that about fifteen years ago a man discharged from the army with lung disease and tapeworm came under his notice, when it occurred to him that the destructive properties of creosote to the lower grades of animal life might be made available for killing or so weakening the vitality of intestinal worms that they could easily be got rid of. He therefore gave him some, three times a day, shortly after meals, for six days, and on the seventh a dose of castor-oil and turpentine, which brought away a worm twelve yards long. He has since tried creosote for destroying round worms with great success. In one case a large mass of more than a hundred worms of all sizes came away, and the patient has not been further troubled by them. He has not succeeded so well with the troublesome thread-worms of adults, but has some doubts if the remedy were fairly tried. He has just had the following case of tapeworm :—W. E., aged twenty-three, laborer, pale, sallow, and sickly-looking, but fairly fleshy, came to Mr. Brickwell with hæmoptysis and symptoms of tubercle in the lung, which passed off, and he was able to work through the winter. Four months ago he came to him suffering with the prevailing malady, bronchitis, and he then first began passing portions of tapeworm. He deferred treating him for the latter until his health was better. A month ago he returned in fair health, having frequently passed portions of worm since his last visit. Mr. Brickwell gave him one drop of creosote made into a pill, with pulv. tragacanthæ co. three times a day, half an hour after each meal, so as to impregnate the ingesta. As the

stomach bore the medicine well for two days, he increased the dose to two drops three times a day for two more days, and then to three drops at a time for two more days. On the seventh day he gave him a dose of castor-oil (aperients acted strongly on the patient, or he would have combined it with sp. terebinthinæ). On the fifth day of the treatment, a worm eight yards long came away, and he had slight diarrhœa. Not seeing Mr. Brickwell, he continued the creosote on the sixth day, and took the oil on the seventh, which acted very freely, but brought no more worm away. There appear to have been no symptoms to indicate the presence of the worm until he began to pass portions of it. He had, however, complained of a feeling of weakness, sinking and faintness, for several years, more particularly in the evening. These feelings have now disappeared, and he is stronger, better, and more healthy-looking than before. The two points that struck Mr. Brickwell are—first, that he began passing the worm during a febrile attack (could that have influenced the vitality of the worm, and so tended to its passage?); and, secondly, that he had a chest complication. It is a curious coincidence, that these symptoms should have co-existed in the only two cases of tapeworm which have come under his notice.

2. *On Treatment by Means of the Stomach Pump.* Dr. PAUL SCHLIEP (*Deutsche Arch. f. Klin. Méd.*, B. xiii; *The Practitioner*, 1875.)

Dr. Paul Schliep, of Berlin, has treated seventy-four cases of disease of the stomach in 982 sittings, with Küssmaul's stomach-pump, and obtained very satisfactory results. Among these were two cases of poisoning, one of arsenic and the other by a spirituous solution of lac; both cases recovered. Twenty-five cases of simple gastric catarrh (the pump being employed on the average nine times in each case); seventeen cases of gastric catarrh, complicated with other conditions, of which four cases were complicated with chlorosis, five with nerve lesion, four with pulmonary disease, two with jaundice, two with neoplastic formations in other organs, ten with ulcus ventriculi (three acute cases, the pump being used in the chronic cases about fourteen times); fourteen cases of dilatatio ventriculi (of which five were cured and four improved, and in which the pump was applied on the average twenty-one times); six cases of carcinoma ventriculi. Dr. Schliep, it will be seen, thus treated conditions with the stomach catheter which are usually left alone; and on the other hand, conditions, as ulcer and carcinoma, which it is usually considered unadvisable to treat with instruments that are likely to produce movements of vomiting.

The treatment of simple gastric catarrh with the pump is justified by Dr. Schliep, first of its success, and secondly, on its obstinacy under other methods. He found great benefit from it, even after a few sittings only—and explains it on the same principle that brilliant results are often obtained from an emetic. A recent gastric ulcer is often a *noli me tangere*, but considerable benefit was experienced in chronic and cicatrized ulcers. In cases of dilatation of the stomach, Dr. Schliep commenced his treat-

ment with daily complete evacuation of the stomach. If the muscular coat resumes its contractility, and the atrophy and degeneration of the glandular tissue have not proceeded too far, the abnormal decomposition that occurs in the gastric contents soon disappears. The effects of this mode of treatment on cancer of the stomach were decidedly alleviating. In performing the operation the patient must attend carefully to his breathing, must not bite the tube, and must first hold the head backwards, in order that the obstacle presented by the posterior wall of the pharynx may be surmounted, and then forward, in order to convert the projection formed by the bodies of the third and fourth cervical vertebræ into a concavity. Having entered the cardia, which can be recognized by the length to which the tube has passed, and a slight resistance, an effort should be made to see whether any anatomical change has taken place, which may be known by the occurrence of pain, strong resistance to the entrance of the instrument, and perhaps blood, mingled with the contents of the stomach when they have been pumped out. He finds cases of dilatation of the œsophagus above a stricture at the cardia offer the greatest difficulty to the introduction of the sound. The sound having been introduced, M. Schliep begins with the injection of several syringesful of water at about the temperature of the body, until the patient feels the stomach to be full, or vomiting sets in, after which he carefully extracts the fluid again. Care must be exercised in securing an instrument that works easily and well, so that the wall of the stomach may not be sucked into the openings of the sound. He does not attach any importance to slight tinging of the contents with blood, and remarks that strong alkaline solutions introduced into the stomach produce general hyperæmia and consequent bloody straining of the contents.

In order to remove adherent mucus from the walls of the stomach, he recommends that the patient should be made to execute several movements of vomiting by tickling the fauces, by means of movements of the tube, though this is usually unnecessary, movements of vomiting occurring spontaneously. In other cases, and especially where an ulcer is present, vomiting should be avoided as much as possible. Considerable caution should be exercised in withdrawing the tube, lest portions of the mucous membrane which have got sucked into the holes should be torn away.

Dr. Schliep distinguishes the contents of the stomach in different states into—1. Clear mucus, with neutral reaction, met with in simple chronic catarrh ; 2. Yellow fluid, with neutral reaction, accompanying catarrhal inflammation of the stomach and duodenal mucous membrane in scleria ; 3. Mixed contents, composed of undigested food and mucus, with, for the most part, slightly acid reaction ; 4. Contents in a condition of acid fermentation, occurring in recent inflammatory conditions and ulcer ; the prognosis is here good ; the removal essentially effects a cure ; 5. Contents containing abundance of fungi (Leptothrix, oidium albicans, sarcina), reaction acid, quantity sometimes extraordinarily great ; the regular evacuation of the contents of the stomach greatly tends to remove the accompanying dilatation ; 6. Putrescent contents (coffee-grounds like) often accompanying

cancer of the pylorus, with dilatation of the stomach; the quantity is here again very large and the reaction acid; 7. Abnormal gaseous contents.

Among the remedies used, Dr. Schliep enumerates the following as having been pumped in and again evacuated: Bicarbonate of soda, of which two teaspoonsful were added to a wash-hand-basinful of water, and injected, in cases where the reaction of the contents was strongly acid; potassium permanganate in the proportion of 1 to 100 of water, the quantity injected being again a wash-hand-basinful of water; used in cases where the contents were putrescent; carbolic acid, in the proportion of 1 to 40, though in this case the acid solution should not be allowed to remain long in contact with the mucous membrane; chloralum, boracic acid and tincture of myrrh, were respectively used in weak solutions, when the quantity of mucus secreted was large, and the membrane torpid. The diet was carefully selected, and food given only in small quantities at a time.

3. *Camphor in Erysipelas.* (*Gaz. des Hôpiteaux*, 1874.)

M. Revillout states that he has several times had occasion to employ, with good effect in erysipelas, an application used by M. Delfech at the Neker. It consists in painting the affected surface with a solution of camphor in ether (equal weights); and when this is employed in erysipelas of the face, and the affection has not yet reached the hairy scalp, its progress is usually arrested. It is also very useful in erythema, caused by local irritation.

4. *On Surgical Anæsthesia in Infants by the Administration of Chloral by the Stomach.* BOUCHUT. (*Bulletin Gén de Thérapeutique*, Oct. 30, 1875.)

The writer gives his conclusions as regards the action of chloral in infants, which differs materially from that in adults. It may be given in doses up to forty-five or sixty grains, without provoking pyrosis, gastritis, vomiting, or diarrhœa, and it produces anæsthesia more or less complete. He has employed it repeatedly in cases of chorea, cerebral rheumatism, opening abscesses, and tooth-drawing. Sleep and absolute insensibility have been obtained by a dose of forty-five to sixty grains given in one draught.

A similar result may be obtained by means of suppositories, but the rectum is more irritable than the stomach, and tenesmus, heat and irritation occur if the method be employed for many days. The stomach is the best channel for the administration of chloral in infants. A quarter of an hour after taking the full dose anæsthesia commences, and is completed at the end of an hour.

When it is necessary to apply Vienna paste to a nevus, or to open an abscess, or draw a tooth, chloral is indicated.

The child may groan and move, without waking, whilst the operation is being performed, but then falls again into a passive condition, and on awakening some quarter of an hour later, it is unconscious of having suffered pain, and has been spared the fright of seeing the operator.

V. Obstetrics.

1. *A Case in which the Fœtal Heart was heard early in Pregnancy.* Underhill. (*The Obstetrical Journal of Great Britain and Ireland*, November, 1875.)

The reporter of this case says he first visited the patient while she was suffering from typhus fever, on 6th September, 1874. A thin, lax abdominal wall readily enabled him to detect, by palpation, the outline of the enlarged uterus. With the stethoscope he "distinctly heard the double pulsation of the fœtal heart," "beating at the rate of between 160 and 170 pulsations per minute, while the mother's pulse was only about 120." A fortnight in the hospital sufficed to cure her of her fever. "She was delivered of a very large and healthy child, the writer says, "on the 8th of March, 1875, that is to say, six calendar months and two days, or 183 days, *after* I heard the fœtal heart, which was, taking 278 days as the average duration of pregnancy, only 96 days (13 weeks and 5 days) after the supposed successful coitus."

2. *Gestation continued Three Months after Rupture of Membranes, and Labor Pains lasting Thirty-six Hours.* Dr. N. J. Rains. (*American Med. Weekly*, Nov. 27, 1875.)

The subject of this observation was hoeing in her garden, 5th of June last, when she felt something "break and give way," as she expressed it, and about two gallons of water, in a few minutes, escaped. Labor pains soon set in and continued thirty-six hours, when they spontaneously subsided, at which time Dr. Rains saw her. He soon left her, with instructions to be recalled upon the return of the pains, which he supposed would soon set in again. He was recalled upon the return of the pains, which did not come on again, however, until three months had elapsed; and he then delivered her of a large, healthy child, after an easy labor.

3. *Sloughing of Uterus and Bladder as a Sequel of Labor.* Emmet. (*Med. and Surg. Reporter*, January, 1876.)

The following case is reported by Dr. Emmet, from the New York Woman's Hospital:

At the age of 22 the patient was taken in labor with her first child, and about forty-eight hours after, the waters ruptured, and a child weighing fourteen pounds was delivered by means of the forceps. The condition of the patient was favorable for two weeks, when she noticed that her urine dribbled away by the vagina. Two weeks afterward, or one month after labor, she passed some large sloughs. These sloughs were preserved by her physician, and, on examination, proved to consist of two masses—one of them consisting of the placenta, and the other the base of the bladder and cervix of the uterus.

At this point the main interest of the case rests, and, unfortunately, it is involved in obscurity. The point referred to is this: Under what circumstances did the accoucheur, after delivering a child of fourteen pounds, neglect to see that the placenta was delivered? The only explanation possible, without gravely impeaching the competency of the attendant, is to suppose that the cord, with a portion of the placenta, came away, and, from causes not explained, the deficiency was overlooked. Another question to be considered is, did the remaining placenta, directly or indirectly, cause the extensive sloughing of the pelvic viscera? This is another question difficult of solution, though, from the time intervening between the labor and the passage of the sloughs—one month—it is fair to assume that the retained placenta did have an influence. When the patient entered the hospital, nearly five months had elapsed, and her condition then was as follows: On placing the patient on her back and separating the labia, a prolapsed fundus of the bladder was discovered. When this was replaced by a sponge probang, no sign of uterus could be discovered. When she was examined by the rectum, a small nodule was discoverable in the place that should be occupied by the uterus. After a careful examination of the case it was decided that no operation for the closure of the base of the bladder could be successful, from the fact that there was not a sufficiency of tissue. It was then decided, with the consent of the patient, to perform an operation for the closing of the vagina. This was done, and after it was performed the patient enjoyed comparative comfort.

4. *The Management of Abortion.* Dr. W. D. Hazzard. (*Virginia Med. Monthly*, December, 1875.)

On being called to a case threatened with abortion, my invariable rule of practice is first to ascertain as nearly as possible the stage of the pregnancy, frequency and the extent of the pains, the amount of hæmorrhage, and the cause, if known, that has induced the symptoms present—whether they be habitual, or accidental, immediately predisposing or exciting. Having elicited all the information I can from the patient or her friends, I then institute an examination per vaginam. If I find the os uteri dilated and flaccid, with expulsive pain at the menstrual periods, whether attended with hæmorrhage or not—if the os be dilated to any considerable size, I regard the case as of doubtful character and make my prognosis accordingly. But if I find the os uteri firm and undilated, even if I find hæmorrhage attended with severe pain, I regard the case more favorably; and if the other symptoms warrant the belief that the fœtus be living, I make the effort to save the conception. I endeavor to bring my patient as speedily under the influence of opium as possible. Having done this, I endeavor to keep her under the influence of the drug as long as any symptoms remain of pain or hæmorrhage—experience having taught me that many cases may be carried to a favorable termination that under a more temporizing treatment would result in miscarriage. I am thoroughly

convinced that many cases of abortion are caused by nervous irritability of the uterus, resulting in an intolerance to the presence of the fœtus in the womb; hence nature endeavors to rid the organ of its contents by expulsive efforts. If this irritability be overcome by the free and full administration of the sedatives and narcotics, the pregnancy may oftentimes be saved.

I do not think authorities have laid stress enough on the importance of thorough investigations in such cases as I have spoken of, to enable the practitioner to make a clear diagnosis. Neither do I think they attach sufficient importance to the wonderful powers of opium, administered with the view of procuring its full effect. In my hands, it has seldom disappointed my expectations.

5. *A Case of Prolonged Gestation.* PROF. FRANK WELLS. (*Bost. Med. and Surg. Jour.; Obstet. Jour.*, Dec., 1875.)

Mrs. M., a lady of great intelligence, had sexual intercourse with her husband on August 27, 1874, two days after the completion of her monthly period. On the following day her husband was called away by business, which detained him from home until the existence of pregnancy had declared itself to his wife by the cessation of the catamenia. She quickened in the early part of January, 1875, and naturally expected to be confined about the 3rd of June, for which period she engaged her nurse. Labor did not come on, however, until June 26th, nor was it completed until the following day, exactly three hundred and four days from the date of sexual congress.

The birth, which was a tedious one, necessitating the application of the forceps, was chiefly characterized by the almost entire absence of liquor annii, only sufficient being discharged to make upon the sheet a stain of the size of a silver dollar. The child, which weighed eight and one-half pounds, looked as though it had been, in a measure, macerated in the amniotic fluid, its skin being loose and wrinkled, and the epidermis peeling off in strips. At this date (November, 1875), the child (a boy) is healthy and vigorous, and weighs eighteen and one-half pounds.

The case is remarkable, not only for the long continuance of the gestation, but also for the undoubted evidences of the absorption of some, at least, of the liquor annii through the cutaneous surface of the fœtus. That this must have been the case is indicated by the fact that as late as the eighth month the child was quite freely movable in the uterine cavity, which shows that at this time there must have been some fluid in which it could float; and still further, by the absence, during gestation, of all painful motions of the child, which would undoubtedly have been felt, had the solid contents of the womb come in direct apposition to the uterine walls, without the medium of a protecting fluid.

VI. Gynecology.

1. *Paralysis from a Retained Pessary.* Dr. Gervis, London Obstetrical Society. (*Med. & Surg. Reporter*, January, 1876.)

At a late meeting of the Obstetric Society of London, Dr. Gervis exhibited a pessary which had been removed from a patient fifty-six years of age. Fifteen years previously, it had been introduced in the vagina to relieve prolapsus of the womb. Four years ago she began to feel a weakness in the lower back. Two years ago her legs became weak, and she was unable to walk without assistance. For six months she has been bedridden. For the last six months she has had discharge from the vagina, occasionally tinged with blood, and highly offensive. She can neither stand nor walk, and is able to move her legs in bed with difficulty, being attacked two or three times during the night with cramp in them. On examination, a large round metallic pessary was found imbedded in the vaginal walls, and was removed by the aid of bone forceps, a considerable quantity of brownish purulent discharge, horribly offensive, escaping. All the paralytic symptoms were relieved after its removal. Dr. Cleveland remarked that, apart from the interest attaching to the long impaction of a foreign body in the vagina, there was the notable fact that a quantity of highly offensive putrid matter must have been locked up for a considerable time, without the supervention of septicæmia. The case tended to show, in connection with the recent debate before the Society, the necessity for the co-existence of some peculiar condition of the general system before absorption of morbid matter, followed by blood-poisoning, could be effected.

2. *Cases Showing the Importance of Making a Careful Physical Examination.* By Clement Godson, M.D., Assistant Obstetric Physician to St. Bartholomew's Hospital. (*The Obstet. Jour.*, Dec., 1875.)

Case I.—On August 14th, 1875, C. N., single, aged seventeen, of excessively anæmic appearance, applied at the out-patient room, stating that she had been losing large quantities of blood from the vagina since Christmas; had been regular from fourteen years of age up to that time; had never missed a period. Cannot say that she has been free a day since Christmas; is sometimes deluged with blood, and passes large clots. Previously never suffered from menorrhagia or leucorrhœa.

The under-garments, even the petticoats, were found saturated with blood. The abdomen showed no signs of enlarged uterus. The cervix uteri was ascertained by vaginal examination to be short, the os patulous the uterus retroverted, but freely movable.

The patient was admitted into the hospital.

For two or three weeks, complete rest, with the cold douche, and the administration, first of ergot and subsequently of cannabis indica in large doses, also the replacement of the uterus by means of a pessary, were tried, but with little or no improvement. On September 6th, some

cotton wool saturated with tr. ferri. perchlor. was passed into the uterus. It seemed to grate over a roughened surface towards the fundus. This only served to increase the hæmorrhage.

On September 14th, the os uteri having previously been well dilated by tents, I passed my finger into the uterus, and detached from the fundus a quantity of soft pulpy tissue, having very much the appearance of decidua. From this day the hæmorrhage ceased entirely, and the patient left the hospital on October 12th, perfectly recovered.

CASE II.—On October 7th, 1875, S. E., aged forty-seven, was led into the out-patient room, supported by two friends, walking in a doubled-up position, the face expressive of great suffering. She stated that she had been married twenty-one years, and had had eight children and five miscarriages, the last, a child, seven years ago. Catamenia commenced at thirteen years of age, and continued with regularity up to three years ago, excessive in quantity during the last ten years. No appearance for the last three years. Has been subject to leucorrhœa ever since marriage. Three weeks ago was seized with violent pain in lower back and abdomen, which has never abated, and prevents her from sleeping. This is accompanied by a discharge from the vagina, of a brownish color, sometimes sanious, and very fetid.

No abdominal swelling was detectable. A vaginal examination showed the cervix to be very short, smooth and indurated, the uterine walls to be felt bulging from it on all sides, the os patent, and a quantity of sloughing tissue protruding from it. Uterus quite movable.

The patient was admitted into the hospital, and in the evening a sponge tent was inserted.

On the following day I introduced my finger into the uterus, the os being well dilated, and with the aid of the ovum forceps I succeeded in removing all the sloughing mass which I could feel attached to the posterior wall. The odor from this was very fetid, and I washed out the uterus with a weak solution of iodine. A few days subsequently a slight attack of pelvic cellulitis occurred, and some deposit was detected posterior to the cervix. This, however, soon cleared up. The uterus is now quite movable, the patient is free from discharge and pain, and her general health is rapidly being restored.

CASE III.—On October 6th, 1875, E. B., aged thirty-two, applied at the out-patient room, her face very sallow and expressive of pain.

Has been twice married, thirteen years ago to first husband, by whom she had two children; eight months since to present husband. Catamenia regular till five months ago, up to which time was quite well. Since then there has been a continual discharge from the vagina, which is either like pure blood, or is of a brownish color, and is very fetid; sometimes passes large clots.

Physical Examination.—Roof of vagina transformed into an irregular mass; the os uteri very patulous; in the centre of it the tissue in some parts very dense, in others friable, breaking down and bleeding

when touched. The hand on abdomen comes upon a well-defined swelling, reaching almost to the umbilicus, pressure upon which is directly conveyed to finger in vagina. On abdominal auscultation the fœtal heart can be plainly detected. *Mammæ* very attenuated; turbid serum can readily be squeezed from nipples.

The patient was admitted into the hospital.

On visiting the ward on October 11th, I was informed that during the night a large quantity of watery fluid had suddenly passed from the vagina, and the patient had been in intense agony ever since. She was rolling in the bed with pain; her pulse almost imperceptible, and so rapid it could hardly be counted. I found the os uteri dilated as widely as seemed possible without the tissues being rent, and the fœtal head was presenting. The patient was at once placed under the influence of ether, and I perforated the head, and subsequently the chest, and succeeded in extracting a fœtus (as far as I could judge, of nearly six months' development) through quite a small aperture, without having exerted any undue force in traction upon it. The placenta soon followed, and there was hardly any loss of blood.

She gradually sank, and died on the 13th from exhaustion. The autopsy showed no signs of a rent in the uterine structure.

Remarks.—These cases show the importance of a careful physical examination. In the first there was no history of pregnancy, or even coitus, ever having taken place; a vaginal examination was insufficient to discover the cause of the hæmorrhage, and it became necessary to explore the cavity of the uterus before the origin was ascertained. In the second case the symptoms were rather those of carcinoma, and the vaginal examination alone revealed the real nature of the disease, a submucous fibroid sloughing. In the third case carcinoma of the cervix was believed to exist, and the patient had been treated for such by her medical attendant, but no idea of pregnancy existed. There was no history to lead to such supposition. It was the examination of the abdomen alone which led to the discovery. It shows, therefore, the importance of extending the investigation further than a mere vaginal examination.

3. *Note on the Discharge of Ova, and its Relation in Point of Time to Menstruation.* Dr. JNO. WILLIAMS, M.D. (*The Obstet. Jour. of Great Britain and Ireland*, Dec., 1875.)

The exceeding great value of all observations made on this subject by physicians, capable of properly investigating it, is the only reason for giving so much space to it. The reporter, Dr. Williams, assistant obstetric physician to University College Hospital, London, read this paper before the Royal Society of London, last May.

It is a recognized fact in physiology that ova are discharged in connection with the menstrual function, but it is uncertain at what time in the course of the month the separation takes place. It is generally understood to occur towards the end of the discharge, or immediately

after its cessation. I have, however, reason to believe, from observations made in several subjects, that such is not the case, but that it takes place before the appearance of the monthly flow with which it is connected. The cases which have come under my observation fall into four series, as follows:—

A. Cases, six in number, in which a Graafian follicle had been matured and actually ruptured.

(1). The first of these was a young girl who died through the effects of a fall, three or four days before the expected return of the catamenia. In the left ovary was a recently ruptured Graafian follicle. The cavity of the follicle was about ½ inch in diameter, and contained a recent clot, which projected slightly through the rupture; the clot was of a fresh red color, nowhere adherent to the parts around, for on making a section through the follicle it fell out. The wall of the vesicle was of a pale yellowish color, and slightly wrinkled. The rupture had evidently taken place a short time only before death.

(2). The second subject was a woman who died suddenly through a fall, probably a fortnight after the cessation of the last menstrual flow. On examination a considerable quantity of blood was found in the cavity of the peritoneum, and the liver was torn. In the left ovary was a ruptured follicle, with corrugated and collapsed walls; its cavity contained no blood, but there was a slight effusion between its lining membrane and its outer coat. The depth of the follicle from the rupture to the furthest point of the opposite wall measured nearly ½ inch. It is not impossible that this follicle was ruptured somewhat prematurely by the shock of the fall.

(3). The next example was observed during life. Mr. Christopher Heath performed ovariotomy on a patient on the fourteenth day after the cessation of the last catamenial discharge. Menstruation lasted usually three days, and the patient had always been regular every four weeks. In the ordinary course of things the next flow would have appeared in eleven days. When the diseased ovary had been removed, the remaining one was raised up, with a view to see if it were healthy, and it was observed that it contained an enlarged Graafian follicle, which became ruptured when being held in the hand. I ought to add that the flow returned three days after the operation, and eight days before it was due.

(4). The next case was a young woman who died of pleurisy on the fifth day of menstruation. On the surface of the left ovary was a rough, brownish-colored, star-like cicatrix. On section, there was seen under the cicatrix, a corpus luteum, dilated in the middle and narrow at both ends, nearly ½ inch in length and ¼ inch in width; its walls were in some parts of a pinkish and in others of a yellowish color, slightly, if at all, thicker than those previously mentioned, and had small prominences on its inner surface. In the centre was a partially decolorized clot, which was but slightly adherent to the surrounding walls. From these characters it is evident that the rupture of the follicle had taken place several days before.

(5). The fifth member of this series was a patient who died on the fourth day of menstruation, and about the ninth of typhoid fever. One ovary contained a corpus luteum similar to the one just described.

(6). The last example occurred in a young girl, who died of pneumonia six days after the cessation of the catamenia. On the surface of the right ovary was a small cicatrix, beneath which was a corpus luteum with the following characters:—It was of an irregular, elongated shape, nearly ½ inch in length and ¼ in width; had thick, yellow, convoluted walls, and enclosed a small whitish mass, in which were two dark-colored spots, which were evidently the remains of a clot. This ovary contained also a Graafian follicle of the size of a small pea. The determination of the age of effused blood is always difficult. In the Graafian follicle which becomes ruptured without impregnation taking place, it is known that certain definite changes occur; the wall of the vesicle becomes thick, yellow, and convoluted; the blood which flowed into it and filled it becomes decolorized and absorbed. The exact length of time in which these changes in the follicle are brought about, is not accurately determined; but it is known that the corpus luteum of one menstruation has become considerably atrophied by the return of the next.

It appears to me that the yellow body in the last example of this group was considerably older than the two preceding ones, and that it was more than a fortnight old, and that the two preceding ones were from eight to ten days.

B. *Cases, four in number, in which a Graafian follicle had been matured and hæmorrhage had taken place into its cavity, but no actual rupture had occurred.*

(1). The first case was a patient who died of pyæmia in the third week after the cessation of the last catamenial flow. The left ovary contained a follicle ½ inch in diameter, distended by a recent non-adherent, softish coagulum, uniform in consistence and color. This follicle was prominent above the adjacent surface of the ovary; and its superficial wall was thick, and presented no tendency to point or rupture. There was no recent rupture to be seen on the surface of either ovary.

(2). The second example was a woman who had undergone an operation for fistula in ano. The monthly flow made its appearance a week before the expected time for its return, and she died five days after. One ovary contained a follicle measuring ⅝ inch by ½ inch; this follicle contained a bright red, fresh, loose clot, and its walls were thin and not corrugated. From these characters it appears that the hæmorrhage into the follicle had taken place but a short time before death.

(3). The next was a patient who had undergone an operation for the removal of an ovarian tumor. She died a fortnight after the operation, when she had menstruated for one day. At the inner extremity of the left ovary was a large, dark-colored, softish mass, which, on section, proved to be a Graafian follicle containing a brick-red-colored clot, which appeared to be of a spongy texture. It could with difficulty be turned out of the sac. After its removal it was seen that the wall of the sac was formed by a thin yellowish substance.

(4). The last example in this group was a person who suffered with fibroid tumor of the uterus. She died on the third or fourth day of the menstrual flow. Both ovaries were bound to the surrounding structures by tough and firm false membranes. The left contained a follicle nearly an inch in length, in which was found a softish, dark-colored clot, having a spongy texture, which appeared to be several days old.

In the first and third members of this group hæmorrhage had taken place into the follicle unquestionably before the appearance of the catamenial discharge.

In the second, hæmorrhage had occurred before the flow had become due; but the latter, owing to surgical interference, having returned a week before its time, the hæmorrhage took place while the discharge was in progress.

In the fourth, the condition of the clot makes it almost certain that the hæmorrhage had taken place before the appearance of the catamenia.

C. *One case, in which a Graafian follicle had matured, but where neither rupture nor hæmorrhage had actually occurred.*

This was a patient who died of typhoid fever just before the appearance of the catamenia. In one ovary there was an enlarged Graafian follicle, which was highly vascular, and projected like a nipple beyond the surrounding surface. It was evidently on the point of bursting, and it is doubtful whether rupture of the follicle or the appearance of the discharge would have first taken place.

D. *Cases, three in number, in which no Graafian follicle had become enlarged to the size exhibited by it at maturity.*

The first was a patient in whom the menstrual flow had almost ceased. There was no rupture in either ovary, but the right contained a Graafian follicle about the size of a small pea.

The next was a young suicide, who died three days after the cessation of the catamenial discharge. There was no recent rupture in either ovary, but the left contained a follicle similar to the one seen in the preceding case.

The last member of the series was a girl who died of peritonitis, caused by the rupture of an abscess on the right ovary. In the left was a Graafian follicle about the size of a small pea, but no recent rupture. The state of the lining membrane of the uterus showed that in this case menstruation was imminent.

Besides the appearances described, there were in all the preceding cases numerous Graafian follicles, varying in size from a millet-seed downwards, together with some superficial pits and atrophied corpora lutea.

These cases appear to me to bear out the opinion stated at the beginning of this paper, that, in the great majority of subjects, the discharge of ova takes place before the appearance of the menstrual flow with which it is connected; for in ten out of the fourteen, rupture of a follicle, or hæmorrhage into its cavity, had occurred before the return of the catamenia; in one it was doubtful whether rupture of a follicle, or the appearance of the discharge would have taken place first; in two a

menstrual period had passed without maturation of a follicle; and in one a periodical discharge was imminent, though the ovaries contained no matured Graafian follicle. It is not improbable that the follicles which were found in the last three cases, and which were enlarged to the size of a small pea, would have become mature by the next return of the flow.

I have carefully considered the cases recorded by Cruikshank, Jones, Paterson, Lee, Girdwood, Negrier, Coste, and others, and find that, though they do not contribute materially to the solution of the question discussed in this paper, yet, in so far as they go, they favor the view put forward here—a view which derives support from the custom imposed by the Levitical law, and observed to this day by the stricter sect of the Hebrew community.

POSTSCRIPT.

Since writing the above, I have had opportunities to examine two subjects in whom the date of the last menstruation was known.

The first was a girl, aged seventeen years, who died on the fifth day after admission to the Middlesex Hospital, of traumatic tetanus. She was said to have ceased to menstruate just before admission; and the condition of the inner surface of the uterus confirmed that statement. The uterus and ovaries were small and imperfectly developed. On the surface of the right ovary was found a patch $\frac{1}{4}$ inch in diameter, slightly injected, and presenting a punctated appearance. In its centre was a cicatrix, appearing as a white spot, beneath which was situated a yellow body, elongated and irregularly flattened in shape. This appeared to be due to pressure from several Graafian follicles growing in close proximity to it, the largest of which was as large as a small pea. The yellow body measured nearly $\frac{1}{4}$ inch in length; it had folded walls, and in its centre was a thin elongated clot, the middle of which was of a dark color.

The second subject was aged twenty-six years; she died of Bright's disease. The last menstruation began May 13th, ceased May 19th, and death occurred May 28th, fifteen days after the appearance of the flow. Hæmorrhage had taken place into the superficial tissue of the ovaries, probably by reason of the condition of the blood.

In the right was a small superficial prominence formed by a yellow body, which measured about $\frac{3}{8}$ inch in diameter; it was throughout of a yellowish color, and contained no trace of the coloring matter of blood. On comparing these organs with one another and with those previously described, I am led to infer that in the first, 12 to 14 days, and in the second about 20 days, had elapsed since rupture of the follicle occurred.

Reichert has examined twenty-three organs in which signs of menstruation were recognizable. In four cases a Graafian follicle had matured but not ruptured, nor had hæmorrhage taken place, though the decidua menstrualis was in a state of greater or less development; in eighteen cases a Graafian follicle had ruptured, and hæmorrhage had taken place into the decidua; in one case only, in which bleeding had not begun, had a Graafian follicle been ruptured. The latter statement appears opposed to the conclusions at which I have arrived; but this is only apparent; for

in one case a follicle had ruptured, in four a Graafian follicle had matured before hæmorrhage began, and in one of these, rupture was on the eve of taking place; in eighteen, a follicle had ruptured, and hæmorrhage had taken place into the decidua menstrualis. Put in this form, Reichert's cases are not opposed to the conclusions arrived at in the preceding note; and as his cases have not been described, it is not possible to say what their actual bearing may be. The conclusion arrived at by Reichert, after examination of the twenty-three specimens, however, is, that rupture of the Graafian follicle takes place at an early stage of the menstrual flow.

4. *Early Menstruation.* ANON. (*Brit. Med. Jour.*)

"M.D." writes: I have now under my observation, a girl aged two years, who has menstruated regularly for some time. She is in perfect health, and her courses, which are in every respect natural in color, occur every month, causing her much discomfort and pain.

5. *Menstruation and the Law of Monthly Periodicity.* Prof. J. GOODMAN, M.D. (*Richmond and Louisville Med. Jour.*, Dec., 1875.)

The writer so admirably concludes his long article, that we cannot refrain from placing before our readers, in his own words, at length, the pretty definitely settled conviction of the profession at the present day on this vexed question:

The law of monthly periodicity is that which governs and determines the periodic return of those phenomena which collectively constitute menstruation, and must necessarily be the result and exponent of certain changes or series of changes that transpire within the organism in recurring cycles; these cycles being uniform in their duration, definite in their manifestations, and common to woman-kind. The essence or factor of the law, then, is a dynamic cycle of physiological acts. But in what part of the system does this cycle revolve? Where is the seat of these changes?

Not in the ovaries, as Tilt supposed, for their annihilation does not always arrest the action of the law.

Nor in the uterus, for women in whom this organ has been congenitally absent, have experienced unmistakable signs of monthly periodicity.

Paracelsus, DeGraff, and others located the process in the blood. Nature has negatived this class of theories by presenting us with the Hungarian Sisters, in whom the bloodvessels were united at the loins, thus giving them a common circulation, but their menstrual periods were different.

Tyler Smith has advanced an ingenious hypothesis, according to which the monthly cycle is attributed to reciprocal action between the uterus, ovaries, and mammæ. But, as we have seen, two of these supposed agents may be withdrawn with impunity.

An affirmative answer to this question is just as easy and may be just as absolute as those in the negative. There is not the slightest doubt that the functional process by which the monthly cycle is accomplished

is seated in the ganglionic nervous system. The expansion of the pelvis, the growth of the breasts, and the increase of adipose tissue which take place when the young girl arrives at the age of puberty, depends upon a modification in the nutrition of the parts, and that nutrition throughout the body is presided over by the ganglionic nerves, no one at the present day will deny. In order to achieve such important variations from the previous course of nutrition, the nervous tissue itself must undergo structural development, which, as we have already said, like all other structural alterations, has a tendency to be permanent. In the course of this development, the elements of the law of periodicity are elaborated, and the series of changes constituting the monthly cycle are instituted, the operation of the law being usually declared through the circulation (by means of hæmorrhages), which, like nutrition, is controlled by the ganglionic system.

This is the limit to which inductive reasoning will carry us at present, and it is better to await the results of observations than indulge in vague conjectures. What the nature of the changes is, and in what part of the sympathetic system these occur, I leave to anatomists and experimental physiologists to discover.

The only practical bearing of these views to which I will allude at present, is with reference to the operation of 'Normal Ovariotomy.' The originator of this operation, Dr. Battey, anticipated that it would bring about an artificial menopause. In this he will certainly be disappointed in at least half the cases, but it does not seem to me absolutely essential to the success of the operation that it should arrest the progress of the law of monthly periodicity and put a stop to menstruation. That the ovaries continue, after puberty, to affect the general system, and that this influence is even necessary in many individuals to maintain the sexual development in a perfect degree, is undoubtedly a fact, as is shown by an appreciable loss, in some instances, of sexual traits, including the cessation of menstruation upon the removal of these organs. In diseased conditions of the ovaries, this reaction is perverted, and very distressing pathological states, especially of the nervous system, arise in consequence. Such examples are frequently encountered in practice, and a conclusive, though an anomalous, one has been referred to in a former part of this article. It is in severe and intractable cases of this kind that good results are to be hoped for from the operation alluded to; for it is reasonable to believe that when disordered action arises from an unnatural irritant, a withdrawal of the irritant will permit the functions to return to their normal channels.

VII. Dermatology.

1. *Proofs of the Dartrous Diathesis furnished by Comparative Pathology.* Mégnin. (*La France Médicale*, Dec. 4, 1875.)

The reporter, a veterinary surgeon of the French military service, assigns the cutaneous disorders of the lower animals to three grand divis-

ions: accidental, parasitic, and constitutional. He finds that the degree of domesticity has a modifying influence, those longest under subjection, as the dog, presenting cutaneous affections more frequently than the horse and the ox, which are less domesticated.

Lafosse observed psoriasis in the dog during four generations, the disease being transmitted from parent to offspring. Mégnin gives the details of the following case:

A young ox, of fine appearance and in good flesh, had an eruption of miliary vesicles, upon three years of age, in the spring of 1872. The eruption became rapidly confluent, and was seated exclusively upon the lumbar region, though it descended irregularly from the vertebral line on each side, to the extent of four or five fingers in breadth. There was moderate itching, followed in succession by the formation of granular crusts among the hairs, and a very abundant epidermic exfoliation, accompanied by alopecia. At the onset of winter, the animal presented in the centre of the lumbar regions, a denuded, smooth, rose-colored and shining surface, covered with large laminated, friable scales, readily detached by friction, and unaccompanied by itching or exaggerated sensibility. Sulphur and other preparations seemed to limit the extension of the disease, but did not produce a new growth of hair.

In the spring of 1873, there was recrudescence of the disease, the patch becoming larger in every direction, the newly invaded surfaces successively exhibiting vesicles, granular crusts, desiccation of the sero-albuminous secretion of the vesicles, loss of hair, and extensive epidermic exfoliation. Treatment had no greater effect than formerly. In the spring of 1874, there was a third attack, the disease affecting a surface extending from the throat in front to the base of the tail behind, and descending laterally to the middle of the costal region. The affection pursued the same course as formerly, but curiously enough, it respected all the parts colored by pigment and covered by red hairs. In July, the alopecia and exfoliation left the superior half of the trunk almost entirely bare.

When examined at this time, almost all of the superior part of the body presented an irregular surface, deprived of hair, and covered with large diaphanous laminated scales, adherent by one or two borders (third stage of eczema). In front, the affection was still in its initial period, the hairs were still in situ, but bristling and surrounded by granular crusts. At the base of the hairs could be seen the reddened skin, superficially ulcerated, and presenting all the signs of the second stage of eczema. In the midst of this dry, eczematous and laminated surface, were islets of sound skin, covered with red hairs. In all the affected parts, the skin preserved its normal suppleness and thickness, hence M. considered it to be an eczema, of what the French call the "herpetic" class.

Microscopic examination demonstrated that the superficial parts of the derma were alone affected, and the absence of parasites.

What follows is interesting, in view of the fact that the English and American schools of dermatologists are disposed to doubt the existence of

the dartrous diathesis, upon which depends the pathology of the French view. According to the latter, the symptoms detailed above, point to a constitutional diathetic affection.

Veterinary practice has this advantage over the treatment of diseases in the human body: the affected subjects may be killed at any stage of a malady to rectify a diagnosis, or to note the extent of the disease. In the instance of the ox whose case is described above, no disorder of the splanchnic viscera, nor of the vascular and muscular systems, was established post-mortem. *All* the bones, however, on section, presented a striking discoloration, which was noticed even by the butcher. Brown concentric rings also appeared, equal in number to the recrudescences of the malady; and suggested the well-known experiments of Flourens on chicken bones. Microscopically, the coloration of these zones appeared to be exclusively due to deposition of pigment granules quite analogous to those found in the skin. This fact tended to show a profound alteration of nutrition, effected by a disease whose principal manifestation was in the skin, *i. e.*, a constitutional disease.

The paper concludes as follows: In the view of Hardy, chronicity, tendency to relapse, simultaneous existence or alteration of lesions of skin and mucous membranes, and heredity (occasionally established), point to a morbid principle affecting the whole economy, and generating the dartrous diseases. The facts, cited above, give additional proof of the impregnation of the entire economy with the morbid principle, which is called the dartrous vice. It also adds to the experiments of Lafosse, referred to above, as showing the inanity of the anatomical theory, which can only discern in the dartrous diseases a local inflammation. This theory is still held by Devergie and some pupils of Cazenove.

It must be admitted that the advocates of a dartrous diathesis possess, in the details collected by Mégnin, the strongest argument yet advanced in support of their views.

2. *Pellagra.* Béhier. (*Le Progrès Médical*, Nov. 6.)

Two cases of sporadic pellagra having been discovered in the Hotel Dieu, Professor Béhier thus describes the cutaneous lesions:

These vary in appearance according to the period of observation. The cutaneous disorder has been properly called pellagrous erythema, for at the outset it is decidedly erythematous and, later, when there is profound alteration of the skin and the disease has become inveterate, the cutaneous manifestations are varied. The integument becomes dry, fissured and furrowed; later, a species of ichthyosis is developed (Strombio). After several successive attacks, warty and even horny tumors (Coldesini) appear. It is the Italian authors who have especially dwelt upon these exceptional forms, and several among them are more remarkable for their fancifulness than for their exactness of description. The eruption is chiefly located upon the hands and feet, but is also to be found upon the face and the lateral portions of the neck—situations, in short, which are not protected by clothing. When stockings are worn, the eruption will appear where

any holes are to be found; and in Landes the parts of the leg protected by the hunting leggings remain unaffected (Bouchard).

3. *Generalized Melanosis.* BERGERON. (*La France Méd.*, Nov. 13, '75.)

B. reports the case of a young silversmith, 21 years old, pale and emaciated, having reddish patches diffused over the skin—principally of the face—and slightly discolored mucous surfaces. He had never suffered from scrofula, syphilis, or other grave disease, and his hereditary antecedents were excellent. A series of painful tumors developed upon the surface of the integument of his chest, some attaining the size of the fist. In the first, the integument which covered it, was unaltered in color, but soon ulcerated, and gave exit to a bluish-black, semi-solid matter, exactly resembling wet powder. Spontaneous closure of the orifice occurred, and was succeeded by reformation of the tumor. This second became as large as two fists, and, after a drainage tube had been inserted with no results, it was opened and again gave exit to blackish contents. Six similar tumors appeared in rapid succession soon after, but these were unaccompanied by pain. The first, having increased considerably in size and become more painful, was removed by the knife, no ganglionic enlargement having been found in the neighborhood.

On the 27th of October, spontaneous disappearance of two of these tumors had occurred, without the intervention of physician or surgeon.

These tumors were evidently situated in the subcutaneous cellular tissue, having but slight connection with the subjacent fasciæ. They were indolent, indurated, irregular and rough. The skin glided freely over their surface, but through it could easily be seen the black color characteristic of melanotic tumors. No lesion or tumor of the internal organs could be discovered. The only constitutional symptoms evident were: emaciation, feebleness and anorexia.

Though melanosis and melanotic cancer have certain symptoms in common, one need never be mistaken for the other, since the distinction between them has been clearly defined by Nélaton. The case reported is interesting, as no record has yet been made of the spontaneous disappearance of similar growths, nor of their occurrence in so young a subject.

4. *A Case of Argyria.* B. RIEMER. (*Arch. d. Heilkunde*, 1875, No. 4.)

A man, 43 years old, was treated for tabes with nitrate of silver, and had taken during two years about 550 grains. The whole integument, especially of the face, had assumed a gray hue, when he died of pulmonary disease. Silver was found in almost all the internal organs, but most abundantly in the skin. Numerous grains of pure silver were deposited in the connective tunics of the corium, chiefly in the vicinity of the small vessels, and in the tissues of the sweat-glands. No silver was found in the layers of the epidermis and the tunics of the lymphatic vessels. The writer is of the opinion that the deposition of silver is purely mechanical. By the secretory organs of the integuments, the reduced metal is removed from the blood, and, since it cannot pass through the epidermis, it remains beneath, and there accumulates.

5. *Feigned "Erythema Gangrænosum."* Fox. (*Lancet*, Jan. 16.)

The author states that he has always regarded the disease which answers to the term given above, with grave suspicion. In almost all cases it is feigned.

A stout and healthy-looking servant girl exhibited, in various parts of her body, long red patches; with scabs forming on the outer edge of each patch, leaving a narrow, red rim around it. Some of those broke up into irregular patches of dead white skin, surrounded by a reddish hole. Over the parts which did not become red, a slight, thin, brownish-yellow crust formed. Anæsthesia seemed to exist where the dead-white areas of skin were seen, with elevation of temperature. On the lower extremities, the general appearance of the eruption gave the idea that some corrosive liquid had run down the front of the leg, and caused the skin to lose its vitality.

When under observation in hospital, the dead-white patches began to assume a yellowish tinge, some becoming covered with a dark honey-colored crust, and some exhibiting a loosening of the cuticle. Deep, sharply-cut ulcers, surrounded by slightly red inflamed margins, were formed on the surface of one leg. When the crusts mentioned above fell, a red blush was left upon the integument. Patches of white cuticle on the breast when rubbed off, left a weeping surface of true skin, which soon scabbed over. The ulcers healed readily.

This was decided to be a case of malingering on the following grounds: 1. The general health was undisturbed. True erythema gangrænosum occurs in the moribund condition, with profound alteration of nutrition. 2. The onset and course of the disease were those of severe blistering, not of a gangrenous disease. There was no livid sphacelated surface; a healthy reparative process was speedily set up. 3. The distribution of the patches was peculiar. They were located, with one exception, on the left side, in parts most accessible to the right hand. (The author does not observe that the patient was right-handed.) 4. The statements of the patient relative to anæsthesia conclusively showed deception. 5. The effect of pseudo-physic in the case confirmed the view taken above. (The patient had improved on a solution of sugar and water taken internally, the wounds being dressed with the simplest unguent.)

No reasons for practicing the deception were discovered, nor was the irritating agent known. The author supposed hydrochloric acid to have been used.

6. *Use of the Induced Currents in Zona.* Dr. Faugue. (*Tribune Médicale*, 1875, page 364.)

The author, (in his inaugural thesis, Paris, 1875, No. 37), recommends, according to the observations and practice of Dr. Picot (of Tours), the use of the induced currents for the pains, often so persistent, of zona. The positive pole should be placed at the side of the spine, and the negative pole upon the painful points.

7. *Treatment of Acne by Soft Soap.* HEBRA—LALLIER. (*La France Médicale*, No. 20, 1875.)

On retiring at night, the patient takes a small quantity of the soft soap upon the end of the finger, and lightly rubs with it the parts affected with acne. This delicate layer of soft soap is allowed to remain in place during the night, and is removed with tepid water in the morning. A single application is not sufficient to produce the desired effect, and hence the friction should be repeated for four consecutive nights. On the fifth day, this application is suspended, and the vapor of steam is substituted for four days. Where this is intolerable or impracticable, an emollient wash of bran or starch water is employed.

[We have found the bran water most efficacious in the pustular forms of the disease. If the face is affected to such an extent that coughing or sneezing produces an intense temporary congestion of the parts, the vapor of steam seems occasionally to favor this occurrence.—ED.]

Guillot concludes from his experience that the treatment of the different forms of acne by friction with soft soap, followed by the topical application of powders, douches or emollient lotions, is easily conducted, does not in general bring about inflammatory complications, and, in confluent cases, will relieve in from six weeks to two months. It is most serviceable in tubercular, pustular or punctate acne, whether these forms be isolated or concurrent; and although the roseolous variety may seem to be aggravated by the treatment, it is ameliorated, particularly when accompanied by a few simple or tuberculated papules. In moist sebaceous acne it is less available. There is no record of its employment in varioliform acne.

The treatment is highly satisfactory in its results, but patients must be cautioned to use only a small quantity of the soft soap at first, as an excess is sure to excite inflammatory action.

8. *Treatment of Infantile Eczema.* CASPARI. (*Bulletin de Thérapeutique*, page 29, 1875.)

Lime water is recommended in infantile eczema capitis and impetigo faciei. The dose varies with the age of the child, from 150 to 300 grammes. With older children, where the confluence of the disease excites pain and restlessness, the lime water is given internally, mixed with pure or diluted milk. The remedy is particularly praised in chronic and rebellious forms, which are ordinarily ameliorated after eight days of medication. External treatment is resorted to only when the secretion is exceedingly irritating, and then Caspari dusts the parts well with carbonate of magnesia. He recommends parents who are poor to wash the diseased surfaces once or twice daily, with a weak decoction of wood ashes.

9. *Silicate of Potassa in Erysipelas.* ALVARENZA. (*Centralblatt f. d. Chir.*, No. 35, 1875.)

A solution containing one part of the silicate to one or ten of water, is used externally, the silicate containing one part of silicic acid to four

parts of the potassic solution. The cure seemed to be rapid in proportion to the concentration of the solution. The author has collected notes of forty-eight clinical cases thus treated, and many others in private practice, having, on seven different occasions, relieved the disease in three days, using a preparation containing one-third or one-fourth of soluble glass.

10. *Collodion for Freckles.* (*La France Médicale*, Nov. 20.)

The mercurial preparations ordinarily employed for the removal of freckles, contain either the bichloride or the cyanide—sometimes both—and are not without danger. Good results may be obtained without resorting to these, by mixing forty-five parts of collodion with five of pure alcohol and one of the essence of lemon. Finally, one part of the sulphophenate of zinc is reduced to a very fine powder and mchanically mixed with the solution.

11. *External Application of Carbolic Acid in Cutaneous Diseases.* BERNDGEN. (*Allg. Med. Central Zeitung*, Nov. 20, 1875; *Archives of Derm.*, January.)

In chronic eczema, B. employs acid. carb. cryst., 5.0; spts. vin. dil., 10.0; aq. destill., 120.0—applied with a brush every morning. In recent cases, 20 per cent. watery or oily solution is used, either as a wash or dressing. It is considered too irritating for the acute stage. He claims great benefit from this topical medication in psoriasis; and, in inveterate cases, recommends acid. carbol., 2.5; spts. vin. dil., aq. dest., *aa* 10.0. It should be discontinued in from three to four days. In prurigo, five per cent. solutions are advised.

12. *Treatment of Alopecia Areata.* J. H. STOWERS. (*British Med. Jour.* August, 1875.)

The author has repeatedly used, with good success, the liquor ammon. caust. and spir. terebinthinæ. The first named remedy is to be rubbed into the scalp with a piece of flannel twice daily, or less often if it causes much irritation. If the ammonia is not tolerated well, he advises the use of turpentine. This treatment must be continued for several months.

Book Reviews.

[NOTE. — All works reviewed in the pages of the CHICAGO MEDICAL JOURNAL AND EXAMINER may be found in the extensive stock of W. B. KEEN, COOKE & Co., whose catalogue of Medical Books will be sent to any address upon request.]

A TREATISE ON THERAPEUTICS, Comprising Materia Medica and Toxicology, with Especial Reference to the Application of the Physiological Action of Drugs to Clinical Medicine. By *H. C. Wood, Jr., M. D.*, Professor of Botany and Clinical Professor of Diseases of the Nervous System in the Med. Dept. of the University of Pennsylvania, etc., etc. Second Edition, Revised and Enlarged. Philadelphia: J. B. Lippincott & Co. 1876.

The appearance of the second edition of this work within a twelvemonth of the issue of the first edition, is a quiet testimony to the superiority of the volume, which needs no commentary or qualification. This book contains about 150 pages more than its predecessor. The subjects additionally treated of, are Coffee and Tea, Tobacco, Arnica, Eucalyptus, Picric Acid, Lithium, Oxalate of Conium, Gelseminum, Jaborandi, Salicylic Acid, Cold and Heat, and Electricity.

The author in his preface says that, "The old and tried method in therapeutics is that of empiricism, or, if the term sound harsh, of clinical experience." * * "The plan of the present work has been to make the physiological action of remedies the principal point of discussion. A thoroughly scientific treatise would, in each article, simply show what the drug does when put into a healthy man, and afterwards point out to what diseases or morbid processes such action is able to afford relief. Unfortunately our knowledge is not complete enough for this, and the clinical method has to be used to supplement the scientific plan." As a result of this plan, we are treated to the physiological actions of all the drugs that have been experimented with up to the present time. These drug experimentations have been carried on exten-

sively by the author and by European physiologists. This treatise is made up largely of the results of these observations, collected from English, French, Italian, German and Russian sources. *The* distinctive feature of each article of the materia medica treated of by Prof. Wood, is its physiological action. Alcohol, *e. g.*, has eight pages devoted to its physiological action and three pages to its therapeutical uses. The article on Quinia has eleven pages on the physiological action, and only six pages on its therapeutical uses. These minute and extended accounts of this action very naturally lead one to suppose that there must be some sort of connection between the physiological action and the therapeutical use. This connection is not always apparent, and in very many places where the former would suggest the latter, not one word appears to confirm some of the very numerous *new* therapeutical ideas which are now taught in our colleges and practiced extensively. To illustrate this point, we refer to Corrosive Sublimate. Prof. Wood's article is limited to about one page, detailing the physiological action of this drug, and he has not one single suggestion to offer on the therapeutics of it. Producing such disastrous effects on the alimentary canal as this agent does, one would naturally expect some good might be extracted from it; and *experience* shows its incomparable advantages in dysentery, but our author does not allude to it. This book contains very much that is *more* than good, very much that is *most excellent*, yet we exceedingly regret to see our author confirming the reputation that Philadelphia physicians bear, of ultra conservatism in the uses of drugs. The only blemish that his really grand work bears, is the conspicuous absence of the thousand-and-one minor therapeutical points which characterize such modern works as Ringer's, Gubler's and Arinand de Fleury's.

The article on Electricity—most excellent in itself—is supplemented, in the appendix, with several cuts, illustrating the various points of the human body upon

which to place the electrode to produce localized electrization of the muscles. We are exceedingly astonished to see the author utterly oblivious to the authorship of these illustrations: they are evidently copied, with exactitude, from "Ziemssen's Electricität in der Medicin, vierte, Umgearbeitete Auflage, 1872."

So complete a work as Prof. Wood's professes to be, only leaves one exceedingly desirous of the pleasure of perusing extended articles from his pen on such subjects as the elimination of drugs from the system, the differences of action between single and reiterated doses of drugs, the specialization of action upon the motor and secretory nerve centres of "Local Remedies," as our author calls them, and many other subjects of a kindred nature, suggested by his elaborate accounts of the physiological action of medicines.

A Practical Treatise on Diseases of the Eye. By *Robert Brudenell Carter, F.R.C.S.* London: Macmillan & Co. 1875.

This is a practical book indeed; and one which can be highly recommended to both the student and the practitioner. The author has very wisely omitted all theoretical speculations which abound in many continental works on the same subject; he has preferred to travel the safe road of well-settled facts and experience. With a view to practical instruction, he has not thought it necessary "to dwell minutely upon maladies of rare occurrence," nor has he attempted "to achieve that kind of completeness which is procured by undigested compilation." Desirous of giving the reader *his* experience, he very naturally has but little reference to modes of practice of which he is unable to speak from experience.

The book is composed of fifteen chapters. The first five chapters give an ably written account of the "Anatomy and Physiology," the "Examination of the Eye," the "Ophthalmoscope and its Application," the "Principles of Ophthalmic Therapeutics," and the "Principles of Ophthalmic Surgery." The other nine chapters are de-

voted respectively to the diseases of the eyelids, conjunctiva, cornea and iris: cataract, glaucoma, disorders of the fundus oculi, injuries, squint and paralysis, and the uses and selection of spectacles.

For the first time, we think, the interesting fact has been published (page 70), that prior to Helmholtz, in 1848, Charles Babbage constructed a perfect ophthalmoscope which, unfortunately for the scientific fame of England, remained unknown. In regard to the latest improvements of the ophthalmoscope, Carter says (page 95), "one of the most convenient forms is that of Loring as modified by Dr. Noyes of New York." We have not heard of an ophthalmoscope of Noyes, and are inclined to believe that the author meant to write "of Knapp," whose ophthalmoscope is superior to all, but is not mentioned in the book before us.

Carter is a strong advocate for the use of iodide of potassium and mercury in affections of the cornea and iris; and his remarks in regard to the choice between the two are very interesting (page 130): "It may be said that the best rule in practice is to inquire whether the local changes in actual progress are such as to inflict irreparable injury unless speedily arrested. If they are, iodide of potassium should be given in the first instance. If the changes in progress are not of this pressing character, it may often be best to give mercury from the first." The correctness of this view may be questioned by many, but all will fully indorse the following rule (page 140): "While we must neither overlook nor neglect to treat the systemic conditions on which affections of the eye may more or less depend, we must not place reliance upon constitutional treatment alone, to the neglect of the various local applications, by which the local malady can be conducted to a safe and speedy termination. Of the two errors, the less serious would be to neglect the constitutional treatment."

A good ophthalmic surgeon, according to the author, should have a high development of muscular sense, con-

sentaneous action of both hands, ambidexterity, steadiness, and a great deal of preliminary practice in the dissecting room. The instruments, he divides into two classes (page 151): "the essential, which are representative of inventive ingenuity, and the superfluous, which are representative of inventive awkwardness. The former class have been contrived by good mechanicians; the latter by bad surgeons."

Although most operations on the eye are not exceedingly painful, he advises the use of an anæsthetic, and he gives his preference to sulphuric ether (page 180).

His abortive treatment of *styes* is described (page 196) thus: "as soon as the first stage of the coming stye is perceived, the pimple attended with a stinging sensation which the patient can at one recognize, the eyelash passing through this pimple should be extracted by means of proper forceps, and a very fine point of mitigated nitrate of silver should be immediately placed upon the mouth of the open follicle and pressed there for a few seconds."

The passage on "Blepharitis" (page 197) is one of the best in the book. But we are sorry to see the author write so discouragingly on strictures of the nasal duct (page 220): "I have come to the conclusion that the best treatment, in a great number of instances, is that which is only palliative, and that the best surgery, generally speaking, is to leave the obstruction alone." We hope none will imitate this "nihilistic" surgery.

The diseases of the conjunctiva, most practical of all practical subjects in ophthalmology, are not discussed as elaborately as their importance would deserve. Carter's treatment is based on the principles generally adopted. Only we do not rely as confidently as he (page 227) on a solution of nitrate of silver of the strength of two grains, in the treatment of the blennorrhœa neonatorum. With reference to pterygium we do not believe that (page 257) "the patient seldom derives material or lasting benefit from any operation;" nor can we sanction this advice,

if "it extends so far over the cornea as to obstruct vision, * * then the best course is to enlarge the pupil by iridectomy."

In the treatment of diseases of the cornea, blunders are so exceedingly common that every student of medicine will do well to bear in mind these golden rules (page 271): "Keratitis, whatever else it may require, invariably requires local sedatives and local rest; and when it is even threatened, the instillation of atropine, the enforcement of functional disuse and the application of a protective bandage, should be regarded as necessary measures. In the somewhat hybrid cases in which there is unmistakable conjunctivitis, with a tendency to extension of vessels upon the cornea, it is often necessary to combine the different methods of treatment which are required for the two conditions. When this is done, too much care cannot be taken to keep the adstringent away from the cornea and to limit its action to the retrotarsal fold. These may be touched with a stick of diluted nitrate of silver or of lapis divinus; but the application must be carefully neutralized or removed before the lids are suffered to return to their natural position."

In iritis, whether syphilitic or not, the author gives mercury on the following principle (page 314): "I accept resistance to atropine as the one sufficient proof that mercury is needed." "Nor can I believe that the rapidly beneficial action of mercury affords, in itself, any conclusive evidence of syphilis." "I have seen iritis, which I had every reason to think syphilitic, yield readily to atropine alone, and have seen iritis, which I had every reason to think non-syphilitic, resist atropine, and yield only to mercury."

Since Von Graefe introduced his "modified linear extraction" the operation for cataract has been the favorite topic among ophthalmic surgeons, and Carter also gives the subject a very elaborate discussion. He advocates discission for the cataract of infants, discission, combined with suction, for all cataracts in persons under thirty

years, and Graefe's operation for cataracts of older patients. Very interesting are the author's remarks in reference to the "latest improvements" (?) by Kuchler, Liebreich and others.

Concerning the nature and treatment of the glaucomatous diseases, Carter points, with particular stress, to the intimate relation between glaucoma and morbid changes in the trifacial nerve. His advice to use atropine after the operations for glaucoma (page 422) sounds rather singular in the face of the well-observed fact that the use of atropine has in some eyes lighted up the glaucomatous process.

In regard to the diagnostic value of the "choked disc" as an evidence of some intra-cranial lesion, Carter is quite right in saying (p. 426), "I myself can only say that it is frequently associated with such lesion." And to substantiate his reserved opinion he relates the case of a little boy who had choked discs of the most typical character, and several ophthalmologists who saw him had no doubt that he was the subject of some form of brain disease; he died of pleurisy and advanced kidney disease, "and no trace of mischief in his brain could be discovered by the most careful examination," and at the same time a woman whose eyes presented the typical changes associated with albuminuria died, with healthy kidneys, of a tumor in the cerebellum.

His experience with strychnia for atrophy of the optic nerve is not very encouraging (page 436); and he is not able to say in which cases it may act beneficially and in which it will not, unless it has been tried for a few weeks. Such is our experience also; but when we use strychnia we would never dare to allow any member of the patient's family to make the subcutaneous injections, as does Carter.

With most English surgeons, so he employs Critchett's subconjunctival operation for squint, and he pronounces this method superior to that of Von Graefe "in every respect" (p. 507). This is his personal opinion which

we do not share; but we fully agree with him in saying (p. 505): "The only method of perfectly curing squint, even when it is of a moderate degree, is to divide the correction as nearly as may be possible, equally between the two eyes, which really, though not apparently, participate equally in the deviation."

The discussion of "the use and selection of spectacles" is scientific, plain, and exceedingly practical, especially his remarks on the treatment of presbyopia and myopia. "I never recommend the use of weak common spectacles which leave the (presbyopic) patient struggling, as it were, on the very brink of his infirmity and compel him always to exert his ocular muscles to the full measure of their powers," (p. 543). And as to myopic persons, "the limited range of their vision is alone an evil of no small magnitude. Young persons who are short-sighted, and who are suffered to grow up without spectacles, that is to say, with no distinct vision of anything which is more than six inches or twelve inches from their noses, lose an amount of unconscious education which no teaching can supply," (p. 558).

The text is fairly illustrated with diagrams, which, we are free to say, are far more useful than the four engravings which are of very inferior workmanship. With its slight blemishes, the book is yet a valuable contribution to the library, an instructive guide to the learner, and an entertaining companion for the learned.

INSECTIVOROUS PLANTS. By *Charles Darwin, A.M., F.R.S., etc.* With Illustrations. Pp. 462. 8vo. New York: D. Appleton & Co. 1875.

This is the only book in our language treating of plants that catch, destroy, digest and assimilate insects. Naught but commendatory words can be spoken of it. The author's name is sufficient guaranty of its intrinsic merit and eminently scientific character. The detailing of observed facts in the history of these plants, is the characteristic of the work. Those particularly interested

in the study of botany or comparative physiology will find this volume of great value.

A Course of Lectures on Physiology; as delivered by *Professor Kuss*, at the Medical School at Strasbourg. Translated from the Second and Revised Edition by *Robert Armary, M.D.*, formerly Professor of Physiology at the Medical School of Maine, etc. One hundred and fifty wood cuts; 8vo.; pp., 531. Boston: James Campbell.

So many works on physiology have appeared within the past seven years, that it may be invidious to make special mention of any new one, like the above; but, in all candor, any one reading Prof. Küss' lectures must acknowledge that he has a very happy method of presenting the science that he attempts to teach, and that he has kept his book fully up with the latest developments of this subject. As proof of the foregoing remark, the reader is referred, especially, to that part of the subject relative to the functions of the nervous system, in all of the physiological phenomena of the human body. The book is devoid of the exceedingly awkward arrangement of the text of Prof. Hughes Bennett's volume on Physiology; it is not so cumbersome as Flint's late work; and it is superior to Kirke's late work on this subject, in that it presents more details on the subject of alimentation. It is a book that can be heartily recommended to the student and practitioner. Dr. Armary may be congratulated on his selection of such an excellent treatise for translation.

Outlines of Practical Histology; being the Notes of the Histological Section of the Class of Practical Physiology, held in the University of Edinburgh. By *William Rutherford, M.D., F.R.S.E.*, Professor of the Institutes of Medicine in the University of Edinburgh, Examiner in Physiology in the University of London.

A prominent divine, not far from Chicago, lately received the degree of LL.D., from an Eastern University, in addition to the burden of titles which he carried aforetime. In his letter acknowledging the honor, he

wrote: "I seem to myself like an ancient lamp—pretty much all handle." So diminutive is Dr. Rutherford's book, and so ponderous the title, that one is almost warranted in saying, that it is "pretty much all handle." But it ought to be a very useful book after all. It is simply intended as a hand-book of elementary histology, "introductory to an advanced study of the subject;" but the student, and generally the physician, who "works out" the problems which Dr. Rutherford so laconically puts before him, will know a vast sight more of histology and microscopy than he did at the beginning. We know of no better manual for the student who has but little time to spend in practical laboratory work, and desires to use that little to the best advantage.

I. N. D.

MINOR SURGERY AND BANDAGING. By *Christopher Heath, F.R.C.S.* Philadelphia: Lindsay & Blakiston.

This useful little manual, addressed to the wants of the student and young practitioner, has passed to the fifth edition. In the work referred to, Mr. Heath's primary object has been to offer to the house surgeon some serviceable hints on the management of the many accidents and emergencies daily coming under his care. The author has been particularly happy in condensing much useful matter into small compass, and we take pleasure in recommending the work to the house surgeons of hospitals, to students, and those who desire to acquire a knowledge of the little things in surgery—details, upon which, so often, success depends.

J. E. O.

Medical News and Items.

LIBRARY OPENING.—After an unavoidable delay, the library of the Chicago Medical Press Association was formally inaugurated on the evening of the 30th ult.

A special invitation had been sent by the librarian to each member of the Association, and a general invitation had been extended to the profession at large; in response to which, some sixty representative members of the profession met in the library rooms, at 263 Wabash Avenue.

An address of welcome to the new library was given by the President of the Association, Dr. R. C. Hamill. The librarian was next called upon, and briefly stated the object of the meeting. The feature of the evening which had been specially announced, was a salutatory by Dr. Jas. Nevins Hyde, who then delivered a humorous speech in the Latin language. Notwithstanding there were many who regretted that their "Stoddard" or "Harkness" had been allowed to grow dusty and rusty, yet the effect of the speech was most happy, and was the signal for a social interchange of thought and sentiment which was not lost sight of.

Speeches were made and remarks offered upon invitation, by Drs. N. S. Davis, J. P. Ross, H. A. Johnson, W. T. Byford, A. R. Jackson, J. H. Etheridge, J. Bartlett, N. Bridge, A. Fisher, and by the "secular editor," Mr. Cooke, of Keen, Cooke & Co. The report of the treasurer was also called for and read by Dr. J. E. Owens.

OUR COUNTY HOSPITAL FOR THE INSANE is a particularly interesting object for study to every man who desires to know how the insane ought *not* to be cared for. The mismanagement of the insane at the County Asylum has repeatedly been commented upon by the secular press, though without avail. In November, the

Chicago Society of Physicians and Surgeons appointed a committee to investigate into this matter. And at the last meeting of this society, held on January 24, this committee was ready to report on the result of their labor. The lengthy report was listened to by some sixty physicians with the greatest attention, for it contains a great many interesting facts, and is filled with observations which well serve to convince everybody of the necessity of an humane society.

It will enlighten our readers to learn the modus operandi by which the charitable institutions of Cook County are managed, and therefore the following items, clipped from the report of the medical experts, may be interesting:

"Several years ago, when preparations were being made for the erection of the first or northern portion of the present building for the insane, certain competent medical men were consulted as to the choice of a site, and the present one was strongly disapproved of and another selected. But, *in spite of these recommendations, the asylum was placed where it now is.*

The location is one of the dreariest, flattest, most exposed in the country, and on many accounts unsuited for its purpose.

The asylum is under the control of the Board of County Commissioners, and they are finally responsible for its condition and management. Upon these commissioners devolves the duty of appointing the officers of the hospital, and among them the physicians.

Besides the physicians, there is a warden, who, in accordance with the rules for the government of the asylum, drawn up by the commissioners, is the superior officer. The particular rule in question reads as follows:

RULE 5. Every other officer or agent for the county at the insane asylum or poor-house must hold himself subordinate to the warden, as the warden will be held accountable for the proper management of the institution.

The physician is elected yearly by the commissioners, and this year for the first time, as far as we are informed, has an assistant physician been elected.

There is no regular apothecary, as at all State Asylums.

One of these physicians is known to one member of the committee to be an excellent young man who has attended one course of lectures in one of the colleges in this city, and who went to the asylum some time since, hoping to make his sojourn profitable in the way of study. He has never completed his ordinary studies, and has never, until since his residence of a year or so at that hospital, had any experience of any kind in the treatment of disease, worthy of the name. He is in no sense qualified to assume the position of physician to such an institution, and he does not pretend to be so qualified, and yet he has been recently elected on a salary as assistant physician to the asylum.

As regards the superintendent, he is also a young man, who, from the best we can learn, cannot have had an extensive experience in the treatment even of common forms of disease, and certainly not in the management of the insane. The committee have had some reason to doubt whether he is even a graduate in medicine.

They know that he has placed himself on record in this city as a graduate of the Bellevue Hospital Medical College of New York City, and that he has so represented himself to more than one member of the profession in this city. Yet on inquiring of the secretary of Bellevue Hospital Medical College, the committee received the answer that no such name appeared on the books either as a student or graduate of that college.

We have no fear of being successfully contradicted when we say that the supply of food at our county asylum is neither so good as the insane require, nor as the cost of maintaining our insane should afford them. At the time of a former visit of the chairman of the committee on his own responsibility, he found the beds,

especially in the lower wards, very coarse and uncomfortable, and destitute of pillows. At the time of the visit of the committee, the same kind of beds, consisting of ticks filled with coarse straw, were in use, but they were supplied with straw pillows, stuffed with similar material with the ticks themselves.

We do not consider them such as should be provided for the insane, certainly far below what are provided in our State hospitals, and for the same or less money. Neither did the clothing of the patients, at least of many of them, appear to the committee to be as good as furnished at Elgin and Jacksonville. It certainly did not seem to be as good as it should be for the money that these patients cost the county.

We have intimated that the accommodations should be better than they are, considering their cost. The asylum costs the county annually about $70,000 in round numbers. This includes simply the total sum expended, in the case of the insane, in supplying food, clothing, medicines, salaries of officers, attendants, etc. We have placed the average number of insane persons at the asylum at 300. But the truth is, 275 would be nearer the average for the past year. This would make the cost of maintaining patients, exclusive of the use of the building, which does not enter into the calculation, about $4.50 to $5 per week. This sum furnishes thousands of boarders in this city with better accommodations, and at the hands of private parties, who expect a margin, as profit on this price.

In the State hospitals of Massachusetts, with the exception of that of Tewksbury, the expense of State patients is $3.50 per week. None of these are specially designed for the pauper insane, but are rather of the character of our own State institutions, and the provision, except in the matter of buildings, is much above that for our insane paupers at Jefferson; and, curiously enough, the cost is less. The pauper insane of Massachusetts are comparatively well cared for at Tewksbury,

at a cost of $2 *per week.* This institution, is under the most competent medical management.

Much the same statement is to be made concerning the asylum at Cranston, in Rhode Island.

In nearly all these cases the insane are cared for at as little or much less expense, and with better fare, than at Jefferson. We call your especial attention to this fact.

We have also compared the cost of maintaining our insane hospital for paupers with two Western institutions, viz., the Northern hospital at Oshkosh, Wis., and the Northern hospital at Elgin, both of which are State institutions. At Oshkosh, the patients are furnished in a very superior manner, with spring beds and hair mattresses on good large bedsteads, and other needful furniture, with excellent food, and first-class medical service—in all these respects better than at our own asylum, and for $4.50 a week per patient."

And so it goes on. Bad location, incompetent physicians, poor food, poor beds and clothing, and all this for $70,000 per annum. *Sapienti sat!*

THE IOWA CENTRAL MEDICAL ASSOCIATION held its third annual meeting Jan. 11, 1876, at which the following officers were elected, viz.:

President—Dr. Enoch Lewis, of Albion.

Vice-President—Dr. W. A. Chapman, of Marshalltown.

Secretary and Treasurer—Dr. Charles Reiterman, of Le Grand.

The annual address by Dr. O. F. Hixson, the retiring president, on the general subject of medicine and the profession, was a very able one. The next quarterly meeting will be held on the 11th of April.

EVENING LECTURES.—Arrangements have been completed for a course of lectures to be given to the members

of the dental profession, on Thursdays and Saturdays from 7 to 9 P. M. These lectures embrace the subjects of Physiology, Histology, Pathology and Chemistry; they began on the first Thursday in January, to continue for thirteen weeks. The inaugural lecture on "The Present Tendency of Science," was delivered by Dr. I. N. Danforth, on January 3rd.

THE ADVERTISEMENTS of the *N. Y. Medical Journal*, published by its exchanges, contain the encomiums of three British and three American periodicals. Of the latter, one is taken from the *Chicago Medical Times*—the small organ of the still smaller, so-called, Eclectic school of medicine in this city. It is now in order for the *N. Y. Medical Journal* to publish its opinion of the *Chicago Medical Times*. This advertisement of the two periodicals is gratuitous.

DR. CALVIN ELLIS, of Boston, has an article in a late number of the *Boston Medical Journal*, the object of which is, to impress on the professional mind that there is no such thing as *general* softening of the brain, clinically considered. He quotes from half a dozen or more authors whose phraseology implies that there is such a disorder as general softening, although no one positively says so. It is presumed no one would say so, yet with them, the profession in general are in the habit of talking and writing as though all cases of cerebral softening were not of a part, and usually a small part, instead of the whole of the brain mass.

There is little doubt that many of our beliefs, right and wrong, are the offspring of the phraseology we habitually —automatically—use, and Dr. Ellis has done a good service in jogging our memories on the subject of one abuse in this direction.

PROF. DEPAUL, of Paris, has lately returned from Brazil, whither he went at the instance of the Emperor to attend his daughter, the Countess d'Eu, in her recent confinement. It seems the Brazilian doctors are no more perfect than those of America. The reception and treatment of Prof. D. was very cold and uncordial until after the successful termination of the accouchement, which had been difficult, when all classes, the profession included, fêted him enthusiastically.

THE PROFESSION in Canada are in trouble about the laws regulating the practice of medicine. While the regular profession are discussing what sort of a bill they shall ask the legislature to enact, to better their condition, and are holding meetings for this purpose, behold a bill "which no person had ever seen or even heard about" is introduced into the House. The *Canada Journal* is suspicious of the bill, and we think with reason, for the document fills twelve brevier pages of the *Journal*, and was drawn by a lawyer. We fear if this bill passes, the profession in Canada will have no time for scientific pursuits.

THE IMPERIAL BOARD OF HEALTH IN GERMANY.—A sum amounting to about $4,000 has been appropriated to the establishment of a Supreme Board of Health for the German empire, the principal object of which will be to collect reliable statistics in sanitary matters, although it is reported that the board is also to be a sort of sanitary court of appeals, to which the district administrative boards or provincial governments will have to refer for sanitary advice and decision.

LEECHES PRESERVED IN SALICYLIC ACID.—The *France Médicale* contains the following: In a saturated solution of salicylic acid the leeches die very quickly, but in a

solution containing just a little acid, they keep better than in common water. In a mixture of 100 grammes of water with four drops of a watery solution of salicylic acid (1.300), leeches can be kept for use during many months, without the water acquiring an offensive odor.

AN AGREEABLE CATHARTIC.—Dr. P. Reich finds a "tinctura rhamni frangulæ" (buckthorn) an agreeable form of administration of the cathartic, and one that is particularly appropriate to cases in which it has to be given for a prolonged period. The usual dose of his tincture is two teaspoonsful at night, but in some cases one suffices, causing a pultaceous stool the following morning.—*Philad. Med. Times.*

THE REPORT of the Rudolph Hospital at Vienna, for the year 1874, shows that during that year, 5,575 patients were received and 479 were transferred from 1873; making a total of 6,254 patients. Discharged cured, 3,375; improved, 1,298; incurable, 346; died, 653; remaining at the end of the year, 582.

Embarras des richesses! During the past two months our medical societies transacted so much important and interesting business that their reporters seem to be completely overwhelmed and unable to give us a fair record of these transactions. We make this statement lest some of our readers, not finding the usual society reports in this Journal, should believe the societies defunct.

ANNOUNCEMENTS FOR THE MONTH.

MONDAYS.

SOCIETIES.
Mondays, Feb. 7 and 21--Chicago Med. Society, regular meetings at Gault House, 8 P.M.
Mondays, Feb. 14 and 28 — Chicago Society of Physicians and Surgeons, regular meetings at Grand Pacific, 8 P. M.

CLINICS. *Every Monday.*
At Eye and Ear Infirmary, (Peoria and Adams Sts.) 2 P. M.—Prof. Holmes.
At Chicago College, 2 P. M. *Gynecological*—Prof. Merriman.
At Central Dispensary (239 W. Van Buren St.), 2 P.M., *Gynecological*—Dr. Adolphus.
At Mercy Hospital, 2 P. M. *Medical*—Prof. Johnson

LECTURES. *Every Monday.* At Rush College (18th and Arnold Sts.), 8½ to 12½ o'clock—Profs. Gunn, Miller, Freer and Powell; 4 to 6—Profs. Lyman and Etheridge. At Chicago College. 8½ to 12½—Profs. Jewell, Quine, Merriman, Hyde and Bond; 3 to 6—Profs. Davis and Nelson, Andrews and Quine, and Roler. At Woman's Hospital College, 9 to 12—Profs. Thompson, Bogue and Blake; 3 to 6—Profs. Paoli, Stevenson and MacDonald.

TUESDAYS.

SOCIETIES.
Tuesday, Feb. 8— Academy of Sciences, regular meeting, 8 P. M. (263 Wabash Av).

CLINICS. *Every Tuesday.*
At County Hospital, 2 P. M., *Medical*—Dr. Bevan; 3 P. M., *Surgical*—Prof. Bogue.
At Chicago College, 2 P. M., *Gynecological*—Prof. Roler.
At Mercy Hospital, 2 P. M., *Medical*—Prof. Hollister.

LECTURES. *Every Tuesday.*
At Rush College, 8½ to 12½—Profs. Gunn, Miller, Allen and Parkes; 4—Prof. Lyman. At Chicago College, 8½ to 12½—Profs. Jewell, Isham, Merriman and Bond; 3 to 6—Profs. Davis and Nelson, Andrews and Hatfield, and Byford. At Woman's Hosp. Coll., 9 to 12—Profs. Marguerat, Bartlett and Fitch;—3 to 6, Profs. Delafontaine, Curtis and MacDonald.

WEDNESDAYS.

CLINICS. *Every Wednesday.* [—Prof. Fitch.
At County Hospital, 2 P. M., *Ophthalmological*—Dr. Montgomery; 3 P. M., *Gynecological*
At Chicago College, 2 P. M., *Gynecological*—Prof. Nelson.
At Mercy Hospital, 2 P. M., *Surgical*—Prof. Andrews.

LECTURES. *Every Wednesday.*
At Rush College, 8½ to 12½—Profs. Hay, Freer, Allen and Parkes; 4 to 6—Profs. Lyman and Etheridge. At Chicago College, 8½ to 12½—Profs. Hollister, Quine, Merriman and Bond; 3 to 6—Profs. Davis and Curtis, Jones and Quine, and Roler. At Woman's Hosp. Coll., 9 to 12—Profs. Dyas, Earle and Thompson; 3 to 5—Profs. Paoli and Stevenson.

THURSDAYS.

CLINICS. *Every Thursday.*
At Eye and Ear Infirmary, 2 P. M.—Prof. Holmes.
At Chicago College, 2 P. M., *Gynecological*—Prof. Merriman.
At Central Dispensary, 2 P. M., *Gynecological*—Dr. Adolphus.
At Mercy Hospital, 2 P. M., *Medical*—Prof. Johnson.

LECTURES. *Every Thursday.*
At Rush College, 8½ to 12½—Profs. Gunn, Miller, Allen and Parkes; 4 to 6—Profs. Ross and Lyman. At Chicago College, 8½ to 12½—Profs. Hollister, Merriman and Bond; 3 to 6—Profs. Davis and Nelson, Andrews and Hatfield, and Byford. At Woman's Hosp. Coll., 9 to 12—Profs. Marguerat, Bogue and Fitch; 3 to 6—Profs. Delafontaine, Curtis and MacDonald.

FRIDAYS.

SOCIETIES.
Friday, Feb. 11—State Microscopical Society of Illinois, regular meeting at the Academy of Sciences, 8 P. M.

CLINICS. *Every Friday.*
At County Hospital, 2 P. M., *Medical*—Dr. Bevan; 3 P. M., *Surgical*—Prof. Bogue.
At Chicago College, 2 P. M., *Gynecological*—Prof. Roler.
At Mercy Hospital, 2 P. M., *On Dis. Eye and Ear*—Prof. Jones.

LECTURES. *Every Friday.*
At Rush College, 8½ to 12½—Profs. Gunn, Freer, Allen and Parkes; 4 to 6—Profs. Holmes and Etheridge. At Chicago College, 8½ to 12½—Profs. Hollister, Quine, Merriman and Bond; 3 to 6—Profs. Jones and Curtis, Andrews and Quine, and Roler. At Woman's Hosp. Coll., 9 to 12—Profs. Hotz, Bartlett and Blake; 3 to 5—Profs. Paoli and Stevenson.

SATURDAYS.

CLINICS. *Every Saturday.*
At Rush College, 2 P. M., *Surgical*—Prof. Gunn; 3 P. M., *Diseases of the Brain and Nervous System*—Dr. Hay.
At Chicago College, 2 P. M., *Gynecological*—Prof. Nelson; *Surgical*—Prof. Andrews; 3 P. M., *Medical*—Prof. Davis.

LECTURES. *Every Saturday.*
At Rush College, 8½ to 12½—Profs. Hay, Miller, Freer and Parkes. At Chicago College, 8½ to 12½—Profs. Hollister, Quine, Sherman and Hatfield; 3 to 6—Profs. Davis and Nelson, Andrews and Quine, and Byford. At Woman's Hosp. College, 9 to 12—Profs. Marguerat, Earle and Fitch; 4 to 6—Profs. Curtis and MacDonald; 3 to 5—Prof. Thompson.

☞ There are six special Clinics daily at the South Side Dispensary (at Chicago College) for students of the Chicago College. A daily Clinic is given at Dispensary of Hospital for Women and Children, 1½ P. M., for students of Woman's Hospital College.